



Abt Associates Inc.

Cambridge, MA
Lexington, MA
Hadley, MA
Bethesda, MD
Washington, DC
Chicago, IL
Cairo, Egypt
Johannesburg, South Africa

Abt Associates Inc.
Suite 600
4800 Montgomery Lane
Bethesda, MD 20814-5341

AGIL Implementation Strategy

Guatemala-CAP Income Generation Activities Project (AGIL)

Contract #
520-C-00-00-00035-00

February 2001

Prepared for
United States Agency for
International Development/
Guatemala
1A Calle 7-66
Zona 9
Guatemala 010009

Prepared by
Stephen Wingert,
Wingerts Consulting, conforme al
subcontrato suscrito con Abt
Associates Inc.

AGIL Program Implementation Strategy

Sustainable Increases in Household Income
and Food Security for Rural Poor in Selected
Geographic Areas, SO4, IRs 1 and 2
Prepared by Stephen Wingert,
Wingerts Consulting, under Contract No.
520-C-00-00-00035-00 with USAID/Guatemala
(under Subcontract with Abt Associates Inc.)
February 2001

Table of Contents

I.	Introduction.....	1
II.	AGIL Program Approaches.....	2
III.	Specific Strategic Guidelines	5
IV.	Municipality-Specific Income Generation Strategies.....	7
	A. Rabinal.....	9
	B. Northern Chimaltenango	17
	C. San Miguel Uspantan.....	25
	D. Santa Maria Nebaj	33
	E. Santa Cruz del Quiché	42
	F. Chisec	48
	G. San Pedro Carchá.....	55
	H. La Libertad	60
	I. Ixcán	65
	J. Barillas	70
	K. San Mateo Ixtatan	75

ACRONYMS

ACODIHUE	Asociación de Cooperación al Desarrollo de Huehuetenango
ACT	Asociación de Cooperación Técnica
ADICBA	Asociación de Desarrollo Integral de Barillas
AGEXPRONT	Asociación Gremial de Exportadores de Productos no Tradicionales
AGIL	Apoyo a la Generación de Ingresos Locales
ANACAFE	Asociación Nacional de Café
APRODUS	Asociación de Productores para el Desarrollo Uspanteco
ASOBAGRI	Asociación Barillense de Agricultores
ASOCUCH	Asociación de Organizaciones de los Cuchumantanes
C	Centigrade
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CBM	Casa Barillense de las Mujeres
CECI	Centro Canadiense de Estudios y Cooperación Internacional
CEDART	Comisión de Artesanos de AGEXPRONT
CESIDE	Central de Servicios Integrales para el Desarrollo
CHF	Cooperative Housing Foundation
CIF	Centro de Integración Familiar
CIPREDA	Centro de Cooperación Internacional para la Preinversión Agrícola
CONALFA	Comisión Nacional de Alfabetización
CORDISA	New producer organization created with CHF assistance in Ixcán
EBF	Encuesta de Bienestar Familiar – Universidad del Valle
EU	European Union
F	Fahrenheit
FEDECOVERA	Federación de Cooperativas de Las Verapaces
FENACOAC	Federación Nacional de Cooperativas de Ahorro y Crédito
FIS	Fondo de Inversión Social
FUDEMI	Fundación para el Desarrollo y Educación de la Mujer Indígena
G-CAP	Guatemala and Central American Programs
GOG	Government of Guatemala
INE	Instituto Nacional de Estadísticas
IR	Intermediate Result
MAGA	Ministerio de Agricultura y Ganadería
MUDE	Mujeres en Desarrollo
NGO	Non-governmental organization
PAF	Plan de Acción Forestal
PEDI	FUDEMI Programa Educativo y de Desarrollo Integral – referred to as Talita Kumi
SO	Strategic Objective
USAID	United States Agency for International Development

AGIL Implementation Strategy

I. Introduction

USAID/Guatemala's income generation strategic objective (SO) pursues sustainable increases in household income and food security for rural poor in selected geographic areas of the country. Four intermediate results, or sub-objectives, have been identified as contributing to achieving the SO: a) More small farmers engaged in higher value production and marketing, b) More micro-entrepreneurs expanding their businesses, c) Market towns stimulating economic growth, and d) Improved family nutrition. The core USAID program designed specifically to achieve the first two of these results and indirectly the third result is the AGIL Program (Apoyo a la Generación de Ingresos Locales).

Rural incomes and social indicators in Guatemala are extremely low in comparison to other countries at an equivalent stage of social and economic development. Chronic under-investment in education, physical infrastructure, financial market deepening, and technology development and transfer undermined development of rural Guatemala for generations. In addition, the linguistic and cultural fragmentation of rural Guatemala dramatically inhibits communication, thus increasing the transaction costs for the delivery of social and economic services. Finally, one of Latin America's most violent civil conflicts, which ended in 1996 through negotiated Peace Accords, decimated and dislocated populations, destroyed productive infrastructure, disrupted economic activities, and absorbed energies that would otherwise have been devoted to development of this region.

USAID/Guatemala's approach to achieving its income generation strategic objective is to focus efforts on six rural departments located in the indigenous western-highland and northern-lowland regions of Guatemala. As described in the Mission strategy, "These areas are poor because of a combination of factors such as: isolation, difficult terrain, limited infrastructure, civil conflict, limited marketing opportunities, limited human capital, and limited institutional presence. These departments are also in the *Zonapaz*, which is the geographic focus of the Peace Accords. More importantly, these departments fall in the lower half, and even the lowest third, of the country's 22 departments in terms of basic indicators of human development, social development, and the status of women."

Within the six departments, the Mission strategy focuses USAID program intervention on twelve municipalities (two of which, San Martin Jilotepeque and San Jose Poaquil are combined in a single target area, denominated Northern Chimaltenango). A municipality in Guatemala is the approximate political/geographic equivalent of a county in the United States, and the municipal capital is equivalent to the county seat in the US. The measurement of program impact on these municipalities will be used as a proxy for the measurement of overall program impact on the six priority departments. The specific municipalities to be targeted were selected "on the basis of secondary socio-economic information and field knowledge that these areas possess the socio-economic

infrastructure and community support that would allow rapid development with an infusion of external resources.” The strategic focus does not limit program activities to the municipal boundaries of the selected municipalities, but instead includes the economic area in which the targeted municipalities serve as the central link to regional markets. Thus the actual area could either be larger or smaller than the geographic limits of the municipality. However, for statistical reporting convenience, program impact will be measured only within municipal boundaries.

Finally, within the targeted municipalities, three target populations were identified:

- Extremely poor families requiring basic assistance to survive;
- Small-scale farmers engaged in production for sale in commercial markets; and,
- Micro enterprises positioned for commercial growth and expansion.

The USAID strategic approach is to focus tightly the investment of its resources in order to have a direct, measurable impact, within a short time period, on improving incomes within the specific priority geographic areas. By the year 2002, USAID estimates that 50,000 poor families (20,000 small farmers and 30,000 micro entrepreneurs) in target areas will have benefited directly from micro enterprise and small farmer development activities in USAID-funded programs. The target for these activities is a 20% increase in household income in the selected geographic areas by 2002 (over a CY 1998 base).

II. AGIL Program Approaches

The core activity designed to support the implementation of the income generation strategic objective is the AGIL program. AGIL is a cross-SO program designed to complement and build on multiple other USAID initiatives, all of which will contribute to achieving the strategic objective. As noted above, the program is specifically designed to address directly the first two intermediate results (more small farmers engaged in higher value production and marketing, and more micro-entrepreneurs expanding their businesses), and to support indirectly the third objective (market towns stimulating economic growth). The AGIL program is being implemented through a contract with Abt Associates.

This document provides a detailed implementation strategy for the AGIL program, based on the information gained during the initial phase of the contract. It will include overall strategic guidelines for program implementation, as well as mini-strategies to tailor program activities to the needs of each of the twelve municipal areas. This document does not modify the existing USAID strategy to achieve its income generation strategic objective, but is instead a strategy of how the Abt contract team and its partners will implement activities in pursuit of that objective.

Although there are many similarities between the target geographic areas, there are also many significant disparities. The common elements that characterize the regions include: abundant inexpensive labor; weak physical and marketing infrastructure

(especially farm to market tertiary roads), high rates of illiteracy, indigenous populations with limited ability to speak Spanish, extremely limited local investment capital and almost no foreign direct investment, restricted access to financial services and technological innovation, and social and cultural trauma caused by thirty-years of civil conflict.

The disparities between the target municipalities are also significant. They include:

- Geography: The quality of soils varies between the fragile soil structures of the tropical humid lowlands to the rich volcanic soils in parts of the highlands. Rain patterns vary from abundant in the Ixcán region to semi-arid in the Rabinal area. Water access is abundant in Northern Chimaltenango and in Uspantan, but limited in Chisec and Santa Cruz del Quiché. Temperatures vary from hot in La Libertad to cold in San Mateo and Santa Cruz.
- Infrastructure: The southern tier of the selected municipalities tends to have reliable roads that guarantee access to domestic and international markets. In contrast, major road links to many municipalities in the northern tier regions, while improving, are still subject to interruption.
- Communities: There are significant differences between the recently settled areas of La Libertad, Ixcán, Chisec and (to some extent) Barillas, compared to the centuries old communities in Rabinal, Northern Chimaltenango, and Santa Cruz. The selected municipalities encompass ten different indigenous languages, in addition to Spanish.
- Economic activity: The economies of the twelve municipalities vary from predominantly subsistence farming in San Mateo and Ixcán, to an emphasis on commerce in Santa Cruz. Seasonal out-migration of laborers is a key economic activity in Barillas and Nebaj but is of lesser importance elsewhere.
- Crops: The agricultural potential of the regions also varies, from the prime coffee producing areas of San Pedro Carchá, Barillas, and the Cotzal municipality associated with Nebaj, to subsistence corn and bean production in Santa Cruz. Agro-forestry is appropriate in Ixcán, La Libertad, and the upper reaches of Nebaj and Uspantan. Horticulture production offers opportunities in Northern Chimaltenango, Uspantan, and possibly Rabinal and Nebaj.
- Partner activity: In addition to the variance in development conditions found in each of the municipalities, there is also considerable variance in the level of development activities already underway. In some municipalities, national or international non-governmental organizations are already implementing intensive development activities, often with USAID funding, that pursue the SO 4 strategic objective. In others, such organizations exist and are interested in taking a lead in pursuing the objectives, but require grant assistance to do so.

In early November 2000, Dr. John W. Mellor prepared a document titled “Elements of a Poverty Reduction Strategy for Guatemala,” which analyzes the options for accelerated rural income generation. Dr. Mellor proposed a two-phased approach that would initially focus efforts within a given geographic area on two or three major, high-value agricultural crops that have the potential to achieve a dramatic and rapid impact on

incomes of a significant portion of the municipal population. In his paper, Dr. Mellor uses coffee and horticulture as illustrative examples of such high value crops. In addition to the direct impact on incomes of a significant portion of the population, Dr. Mellor notes that the resulting increases in agricultural incomes will tend to be spent locally, thus increasing dramatically the overall level of economic activity in the affected region. Within the target regions, dramatic increases in profits from high value agricultural activities are spent on locally produced goods and services, thus multiplying program impact.

The Mellor document is in fact a focused confirmation of the USAID strategic approach underlying AGIL, and specifically of the two target intermediate results, “(IR1) More small farmers engaged in higher value production and marketing, and (IR2) More micro-entrepreneurs expanding their businesses.” In effect, the proposed initial concentration on two or three high value crops directly pursues IR1, and the investment in increasing economic activities by micro entrepreneurs (IR2) creates an auspicious environment for overall economic activity in the region. One can conceive of these two approaches as one being a vertical initiative that attempts to increase incomes by addressing production and marketing constraints from seed to consumer for a limited number of crops, while at the same time adopting a horizontal approach that supports overall economic activity.

The Mellor model recognizes the need to focus the limited resources available to the AGIL program on a few key initiatives, in order to obtain a significant impact. Addressing the constraints to increased production and marketing of just a few crops reduces the range of required specialized production and marketing technical assistance, making the program more manageable and increases the likelihood of success. The focus on agricultural production is justified based on an analysis of the underlying economic activities in most of the target municipalities. This approach is particularly useful in planning program implementation activities in several of the targeted municipalities, particularly Northern Chimaltenango and Uspantan and to a lesser extent Nebaj and Santa Cruz Barillas, where several opportunities to achieve rapid income increases are readily apparent. In this document, the Mellor approach will be referred to as the “core crop model.”

In addition to its focus on a broad impact on income generation, the AGIL program has a specific gender sub-goal of improving the incomes of women in the target regions. For this reason, in applying the core crop model in a given municipality, the AGIL program may also support one or two other economic activities, such as handicraft production, that will specifically benefit women producers. Obviously, AGIL will always seek to include women in all core crop activities as well.

In other municipalities, where more severe production constraints exist due to geographic conditions and/or where investment in development of new high-value crops has yet to occur, the core crop model will be modified somewhat. While the identification of even one such crop in a target municipality may be sufficient to utilize the core crop model, the model is more viable where at least two or three such

commodities are identified. The problem is that in these municipalities, two or three core crop options often simply do not exist, and in fact in some areas it is difficult to identify even one such crop. Given the program's time limitations, it is not possible or wise to introduce a new high value crop and expand its production to a significant portion of the area's population, as this would require an intensive, costly technical assistance input, and would subject producers to a high degree of risk. In these municipalities, the program will need initially to support a broader range of production activities. This approach will task the AGIL team with addressing a broader range of technical issues, although its interventions may be more opportunistic than the holistic seed to consumer approach to be used in the core crop model. Finally, the range of economic activities that might be addressed under this modified approach may include non-agricultural production activities within the municipalities. In this document, this modified approach will be referred to as the "multiple economic activity model."

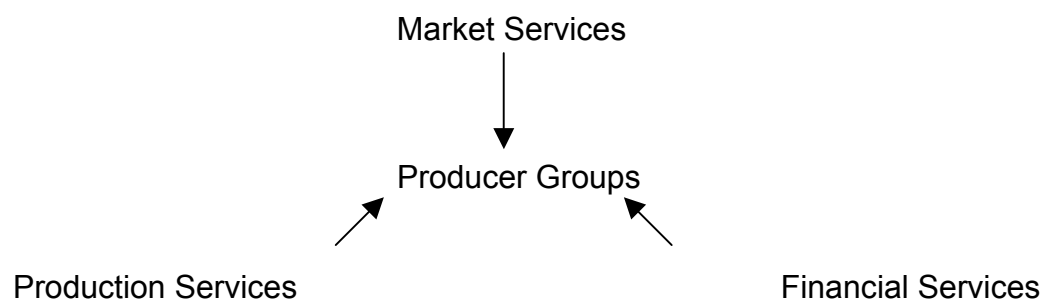
At least one of the target municipalities, Santa Cruz del Quiche, presents such unique development conditions that neither of the above models appears to offer significant opportunities for income generation. As will be described in greater detail in the mini-strategy outlined below for Santa Cruz, less than ten percent of the population is involved in agricultural production, and the poor soils and limited access to water restrict the farmers to subsistence production of corn and beans. This municipality will be dealt with as a special case, and the program will focus on broad, systemic interventions, such as micro enterprise development, rather than on predefined lead economic activities. In this and perhaps one or two other municipalities, special attention will be given to identifying the demand source for the micro enterprise products.

Finally, as noted above, the presence of national or international non-governmental organizations that are currently implementing activities pursuing the AGIL program objectives, or that are competent to do so, must be taken into account in designing the AGIL implementation strategy. Where significant development efforts are already underway (Ixcan – CHF, Barillas – CECI, and San Mateo Ixtatan – CECI) AGIL will simply investigate if and how its resources can help reinforce the on-going efforts. In those municipalities where NGOs have the competence and desire to take a lead role (La Libertad – Centro Maya, Chisec – Talita Kumi and CHF, Carcha – Talita Kumi and FEDECOVERA, Barillas –ACODIHUE, and San Mateo Ixtatan –ASOCUCH), the AGIL grants component will be used to provide them the opportunity to do so, with close supervision from AGIL contract staff. In those municipalities where no lead non-governmental organization exists (Rabinal, Northern Chimaltenango, Uspantan, Nebaj, and Santa Cruz del Quiché), AGIL will take a more direct role in program implementation.

III. Specific Strategic Guidelines

In designing the municipality specific mini-strategies in the following sections, several specific strategic guidelines for program interventions will be applied.

1. In order to achieve economies of scale in program implementation, AGIL will work through organized groups of producers. These producer groups may be either formal or informal, and if formal may be organized as associations, cooperatives, commercial firms, or as any other legal entity recognized under Guatemalan law. However, whether formal or informal, all producer groups will need to have the following characteristics: a) a clear focus on business (while social goals may also be important, the group's attention must be concentrated on improving incomes through improved production and marketing); b) formal administrative structures and procedures; c) active participation by the majority of group members; and d) clearly identified and capable leadership.
2. Support to producer groups may include specific short-term technical assistance and training interventions to: a) improve production and/or marketing of key crops or other products; b) establish administrative systems and procedures required to assure viability of the production activity; c) qualify for on-going support from private technical assistance and credit providers; etc. In addition, small grants may be provided to the producer groups to employ key administrative or technical staff for a limited period until the production activities can generate income needed for this purpose, or for small equipment purchases that facilitate preparing produce for market, or the construction of simple structures needed for product packing, etc. Provision of such grants will reduce the risk to the producer group and facilitate the introduction of new income producing processes.
3. Assistance for the priority economic activities will be based on analysis of binding constraints in each of four parameters, viability of the farmer organization itself, access to production technology, access to financial resources, and access to markets (including adequacy of market infrastructure). The following diagram presents the relationship of these three factors:



4. The program will generally support improved production (quantity and quality) of existing economic activities, rather than introducing new ones. As noted previously, the time available for program implementation makes it extremely difficult to introduce and consolidate entirely new production activities. However, if a new activity can be easily adopted due to the fact that it is very similar to an existing one, its introduction can be contemplated (example: diversification of French bean producers into asparagus production).

5. Where the economic activity involves a high degree of production and/or marketing risk, AGIL will attempt to involve or even work through a private marketing agent with significant experience with the targeted economic activity. Ideally, the market agent will be able to absorb a portion of the risk, for which he or she would be compensated by also sharing a portion of the profits.
6. High value crops are not limited to those targeted for international export markets. Crops grown for export to regional markets or even for domestic markets may in fact offer significant income generation potential to large numbers of producers in the target municipalities (example: oranges in Rabinal).
7. In supporting economic activities, AGIL will help producer groups to access private sector providers of technical assistance and financial resources, helping the producers to develop sustainable relationships with these service providers.
8. AGIL will only undertake activities by itself where it is unable to work through existing non-governmental organizations, working in close coordination with these organizations in order to augment the impact of program initiatives. AGIL is not a stand-alone program, but is instead a key link in a network of program implementers that are collaborating to increase rural incomes in the target regions.
9. The AGIL program includes a component for providing small donations to non-governmental organizations in the target municipalities. These donations can be used for a variety of program initiatives, including initial exploratory activities to identify crops and production groups that merit more intensive assistance, as well as complementary donations to facilitate work with key economic activities (see #5 above).
10. The AGIL assistance to financial market development will follow a two-pronged approach: a) specific interventions to support financial service providers at the municipality level to improve their service delivery, and b) assistance to organizations at the national level to assure that improvements at the municipality-level are sustainable. The efforts will focus on increasing access to financing by micro entrepreneurs in the target regions, by strengthening BANRURAL's 1st and 2nd tier lending policies and procedures, supporting BANRURAL's savings mobilization activities, attracting additional private banks to the target areas, strengthening clients of second tier lending, and supporting other private voluntary organizations (PVOs) offering financial services. AGIL will also provide assistance directly to identified producer groups involved with targeted economic activities, to assist them to meet bank requirements for credit

IV. Municipality-Specific Income Generation Strategies

The following sections present the specific development strategies for each of the municipal areas that have been selected for assistance under the AGIL program. These strategies were developed applying the approaches and guidelines described above to the specific conditions present in each of the selected municipalities, in consultation with program partners and with private sector investors, producer groups, municipal officials, and other donors active in each focus area. At this time, the strategies proposed should be considered draft documents, subject to further clarification and modification based on review with relevant stakeholders.

Each strategy will begin with a brief summary of the municipality's development context, including a description of key geographic features, human resources and the social/cultural context, economic conditions, and development activities being pursued by the GOG and other donors. This is followed by a brief analysis of the development opportunities and challenges confronting the municipality, and the investment options that were considered during preparation of the strategy. Following this, the priority activities that will be supported under AGIL are described, including the basis for their selection, and a timeline for their implementation. In addition, each strategy will identify the organizations or agencies that will be supported in order to increase access to financial service in the municipality. Finally, a brief description will be provided of complementary development activities that might be supported through other programs, reinforcing the income generation initiatives.

The principal sources of information used in developing these strategies are: a) a series of municipal specific monographs prepared by PRODEINSA and ConsultAg for the Asociación Gremial de Exportadores de Productos no Tradicionales (AGEXPRONT); b) Desglose de la Encuesta de Bienestar Familiar, a summary document prepared by Dr. Michael Richards of information gathered by the Universidad del Valle de Guatemala and the Instituto Nacional de Estadística; and c) targeted interviews with experts knowledgeable about the productive opportunities and challenges of the target municipalities.

A. Rabinal

1. Development context

a) Geographic characteristics

Rabinal is located in the Department of Baja Verapaz in central Guatemala, with an area of 504 square kilometers. Good all-weather roads connect to the principal market, Guatemala City, although feeder roads between the municipal seat and surrounding villages and farms are few and in poor condition. The town of Rabinal serves as the principal market town for the western half of Baja Verapaz, although produce from the municipalities to the south of Rabinal is shipped directly to San Juan Sacatepequez and Guatemala City.

The climate in Rabinal is hot and dry, and there are signs of desertification in the municipality. Soils vary from highly fertile in the valleys to poor on the hillsides. The topography is highly fractured; with elevations varying from 0 to 2400 meters above sea level, and with grades of over 50% in many locations. The principal flatlands are around the municipal capital, located 970 meters above sea level. Rabinal contains watersheds that feed both to the Rio Chixoy (also known as the Rio Negro), which flows north into the Gulf of Mexico, and to the Rio Grande or Motagua, which flows east to the Caribbean. An old irrigation system exists near the town of Rabinal, and a portion has been rehabilitated for agricultural use. A number of additional possible irrigation systems are presently being studied, with a potential for benefiting 773 hectares.

Over ninety percent of houses in the municipal capital have electricity, compared to 40% for the surrounding villages. There are only 31 telephones in the municipality. Potable water is only available in the town of Rabinal, although water of lower quality is available in most towns and villages (agua entubada).

b) Human Resources and the Social/Cultural Context

The Instituto Nacional de Estadística (INE) estimates the population of Rabinal in 2000 to be 29,342, although the Municipal Government estimates it to be 49,089. According to the 1994 census, the economically active population totaled 5,780 (4,661 men and 1,119 women), which is more in keeping with the INE population estimate. Seventy percent of the municipal population lives in rural areas. Eighty-three percent of the population is Mayan Indian, almost all speaking primarily the Achi language. Forty-five percent of the population is illiterate (34% of men and 60% of women). Less than 10% of the heads of household have attended school beyond the primary grades.

There are only three producer organizations in Rabinal, with a total of 296 members, all dedicated to artisan activities.

Rabinal was severely affected by the 1976 earthquake, which destroyed much of the municipal capital. During the years of armed conflict, particularly between 1980 and

1983, over 5,000 people in Rabinal were killed, mostly in massacres of 20 villages. Rio Negro is one of the early sites of government repression because of the refusal of villagers to leave lands to be flooded by the Chixoy Reservoir. The violence perpetrated against the people of this site, along with those of Plan de Sánchez, are well documented through forensic exhumations and interviews carried out by the Historical Truth Commission and the Archdiocesan Human Rights reports. The skewed distribution of gender balance in today's population (seven percent more women than men) is testimony to the occurrences of this period, and today widowed women head many of Rabinal's households.

c) Economic Conditions

The Encuesta de Bienestar Familiar carried out by the Universidad del Valle with USAID funding in 1999 found that only about 22% of Rabinal's population were farmers, with another 23% working as agricultural laborers. The other two major employment categories were non-agricultural laborers (24%) and salesmen/women (18%). The average age of the farmers in Rabinal was nearly 50 years, the highest of the surveyed municipalities. This may be explained by the fact that arable land is scarce and youth have few opportunities to farm until their parents die and pass on their land.

Average recorded family income in the month prior to the survey was Q943, among the lowest of the municipalities surveyed. The average rural family income was only Q802.

Agriculture is the main economic activity in Rabinal, despite the fact that it employs only a fifth of the population. The principal crops are subsistence corn, beans, and sorghum. Commercial crops include coffee, peanuts, sugarcane, loroco, tomatoes, oranges, avocados, macadamia nuts, and vegetables. There is little livestock production, limited mainly to family ownership of chickens and pigs. Other economic activities include handicrafts, commerce, and tourism.

d) On-going Development Activities

A recent survey identified ten different development programs active in Rabinal, including Programa Las Verapaces (GTZ), Proyecto Tezulutlán (EU), FONAPAZ (GOG), Plan Internacional (International NGO), Génesis Empresarial (micro finance), Centro de Integración Familiar (local NGO), UNEPROCHI (IDB), Flor de Naranja (international NGOs), APAGRODESH, and SHARE.

Several of these organizations have carried out active programs for a number of years. The Centro de Integración Familiar is the longest active organization, beginning activities in 1976 with earthquake relief. At present it has a well-developed training center and agricultural test area, but its budget has recently declined and its staff has been reduced to eight. The Programa de las Verapaces and the Proyecto Tezulutlán have been active throughout all of Baja Verapaz for over a decade, but their funding currently is winding down, and it appears uncertain whether either program will be extended.

2. Development Opportunities and Challenges

There are a number of factors that create a favorable environment for AGIL program activities in Rabinal. Within Guatemala, products of Rabinal are known to be of high quality and are in high demand. For example, the oranges from Rabinal are considered to be the sweetest and most flavorful in the country, and other agricultural products have a similar reputation. Secondly, in comparison with other departments of the Zonapaz, Baja Verapaz has received relatively little assistance from international development organizations. Development experiences that have proven successful in other regions can be adapted to the conditions of Rabinal with relatively low cost. Third, although Baja Verapaz is a relatively dry zone, it has abundant water resources that can be used for irrigation. Fourth, one of the most successful credit unions in rural Guatemala is based in San Jerónimo, in the eastern part of Baja Verapaz, and it presently serves Rabinal and is expanding further within the target area. Finally, although some sections are in need of improvement, several major all-weather roads connect Baja Verapaz with Guatemala City and Guatemala's major Caribbean port (Puerto Santo Tomás del Castillo), so that transportation costs are relatively low in comparison with other zones.

The Rabinal area also presents a number of challenges. Only a small portion of the terrain is flat enough for agricultural activities, although coffee is successfully grown on the hillsides. Coffee is grown with little technological input, and yields are very low. In addition, coffee quality suffers due to the poor farm to market road network combined with the lack of elementary coffee processing plants located within the region. The farms that are located in the arable flat lands consist of very small plots, each of which grows a small quantity of a number of diversified products. This makes it more difficult to identify a few products with a potential to have a significant impact on incomes for a large number of people in the municipality. In general, educational levels in the region are very low, and it appears that talented youth tend to migrate to Guatemala City and elsewhere. Very few producer organizations exist, and at least based on initial conversations, there may be some disillusionment with the potential for such organizations, despite the successful credit union experience. Finally, although there is a long history of artisan activities in the area, few tourists visit Rabinal, and there has been little innovation in handicraft design and production techniques. Hotel accommodations are very basic and not up to the standards of tourists, except for the backpackers who contribute little to the local economy.

3. Investment Options Considered

There are a number of existing agricultural and artisan activities that could be supported through the AGIL program. The following presents a brief description of the potential activities identified to date:

- Oranges for domestic consumption: As noted above, the Rabinal oranges have a reputation for being the sweetest and most flavorful in Guatemala, and receive

a premium price in the market. However, at present little if any of this premium reaches the actual producers, and market intermediaries often claim that their oranges are from Rabinal when they are not. This creates consumer distrust and reduces the premium. As the producers receive very low prices for their oranges, they have little incentive to invest in fertilizer and other production techniques that could improve both the quantity and quality of their production. It is estimated that there are over one thousand orange producers, none of whom has more than three manzanas. The oranges are grown primarily in the flatlands around the municipal capital, using a rustic irrigation system. Orange trees are intermingled with other trees on these farms.

- Coffee: Baja Verapaz is not known within Guatemala as a prime coffee producing region, but there are several sub-regions to the south, west, and northeast of the town of Rabinal that produce coffee. The producing regions are all above 1,000 meters, and therefore have the potential to produce high quality coffee beans. However, the coffee trees are reportedly very old, and producers do not invest in production enhancing cultivation techniques. In effect, the only time that the farmers focus on their coffee trees is when they harvest the beans, and as a result production is very low. In addition, as noted above, there are few access roads into the coffee producing areas, and farmers haul their production out on their backs or on pack animals. If within a few hours after harvest the cherry surrounding the coffee bean is not removed and the bean washed and dried (a procedure known as beneficio húmedo), the cherry will begin to ferment and the quality of the bean deteriorates. There are an estimated 10,000 coffee producers in Baja Verapaz, one thousand of whom are presently receiving assistance from the European Union supported Proyecto Tezulutlán or by the Centro de Integración Familiar (CIF). As the farms presently meet the standards for organic coffee production, consideration should be given to supporting production of organic coffee, which receives a premium on world markets, taking advantage of the successful experience the ASOBAGRI association has had in Barillas. Finally, although coffee prices on the world market are at historic lows, the low technology, labor-intensive production typical of Rabinal still makes this a profitable activity.
- Handicrafts: Rabinal is a traditional source of ceramics and weavings for the Guatemala market, but as noted above, there has been little effort to modify product design in keeping with consumer demand. Producers now mainly make inexpensive articles for the mass tourist market. Some ceramic articles that were produced in the past, and which could meet today's standards for quality and design, are no longer produced. There is one cooperative of ceramic producers and two associations of textile producers, and these organizations could serve as vehicles to help improve the variety and quality of produce, and to access additional marketing channels. The EU's Proyecto Tezulutlán and the Flor de Naranja project (Share and other NGOs) are providing support to artisan production. There are approximately 300 artisans organized in the three producer organizations, and there are a large number of independent producers

that could become involved in the future. Carved gourds, blackened with a combination of soot and an insect lacquer known as “niij” have been produced in Rabinal since pre-Colombian times. Following the example of the Tarascans in Mexico, there is potential for reviving the industry, especially if the designs and quality finishes formerly used are readopted.

- Loroco: Loroco is a flower (Magnoliófito) that is native to the arid zones of Guatemala, El Salvador and Honduras (it is also produced in Colombia). The flower is harvested and used as a condiment to flavor a variety of traditional dishes. There is a large demand for loroco on the domestic market, and AGEXPRONT has identified a potential export market to meet the demand for loroco among Central Americans living in the United States. AGEXPRONT has prepared a concept paper for a project that would assist 170 loroco producers to improve their productivity, establish collection points and facilities for classification and packing of the product, and assist with initial export activities.
- Peanuts: There are approximately 3,000 peanut growers in Baja Verapaz who produce on plots varying from one quarter to two manzanas. Peanut production is a low technology activity in Baja Verapaz, primarily using family labor and few if any external inputs (some pesticides are used to control a peanut worm). Market prices fluctuate, but producers tend to market only small quantities at a time when cash is needed.
- Honey: There is an association of honey producers based in Rabinal with 27 members, which just received its legal charter. The association members sell their honey through middlemen in a crude unprocessed state. They would like to obtain a homogenizer and pasteurizer in order to improve the quality of their product and market it in smaller bottles with their own label.
- Tomatoes: There are approximately 180 tomato producers in Baja Verapaz who produce on very small plots. Prices fluctuate considerably during the year, and the producers have indicated interest in negotiating a fixed supply contract with a local Guatemalan firm.
- Others: Other possible economic activities for Rabinal that have been mentioned include: Rosa de Jamaica bulbs for tea, chipilín (a product similar to loroco), Persian limes, natural cotton, and papaya.

4. Strategic Choices

Based on review of the investment options and the strategic approaches available to the AGIL Program to meet its objectives, the team proposes to focus its assistance in the Rabinal area on orange production and marketing for domestic consumption; coffee production, processing and marketing; and handicraft production and marketing. Each of these meets the criteria of high value products that can create significant increases in income for a substantial number of producers. Some assistance might also be provided

to honey producers, since they tend also to be producers of oranges and coffee and the assistance could be provided without a significant increase in the demand on program resources. Similarly, some assistance might be provided to help orange growers diversify into Persian lime production for the domestic market, since again this activity can be carried out without needing to organize a separate group of producers, and the production and marketing issues are similar.

Loroco may offer possibilities as a high value export crop, but the number of producers is likely to be small, and so would the overall impact on rural incomes. Conversely, there are many peanut producers, but competition from peanut production in Nicaragua and Mexico severely limits margins, and it is not clear that a significant increase in incomes could result from AGIL assistance. Tomato markets in Central America are extremely volatile, making this crop less attractive than oranges or coffee. Some of the other crops, such as rosa de Jamaica and natural cotton production could over time become important activities, but probably not within the time horizon available to the AGIL program.

The geographic focus of the assistance will be primarily on the municipality of Rabinal, particularly for assistance with production and marketing of oranges and handicrafts. However, assistance with coffee production, processing and marketing will also be provided to producers in neighboring municipalities, i.e. El Chol, Granados, San Miguel Chicaj, and Cubulco.

5. Financial Service Providers

There are several existing financial services providers in Rabinal and neighboring municipalities, and several more plan to initiate activities. One of Guatemala's most successful credit unions, COOSANJER, is located in Salamá, and has a branch office in Rabinal. AGIL will consider support to COOSANJER to assist it to establish an additional branch agency in the neighboring municipality of Cobulco. BANRURAL is the other major financial service provider active in Rabinal, and the AGIL program will provide training and technical assistance to the Rabinal agency, and may seek to convert it into a model agency that can serve as a training site for the region. Assistance to these organizations will support both provision of services to the producer groups identified above, as well as general micro finance lending activities.

Two leading private voluntary organizations offering financial services to micro entrepreneurs, ACT (Asociación de Cooperación Técnica) and Genesis Empresarial, plan to expand activities into the Rabinal area, which will greatly increase the availability of financial services in the region. ACT's expansion will be supported through an AGIL grant, and Genesis' activities will be supported through a separate USAID/G-CAP grant. Finally, BANCAFE presently has an agency in Salamá, and plans to open an agency in Rabinal this year. While these agencies presently will only offer normal banking services, BANCAFE plans to expand its micro finance lending program to sixty percent of its agencies by the end of 2003, and AGIL assistance to BANCAFE will eventually impact on the Rabinal area.

6. Implementation Timeline

Detailed implementation plans will need to be developed with producers in Rabinal, but the following presents an initial plan of activities to be carried out to develop the selected economic activities, and a timeline for their implementation:

a) Oranges for domestic markets

Activity	Timing
1. Meet with informal group of producers to discuss possible quick action market intervention.	Nov 00
2. Carry out quick action market intervention, selecting and packaging oranges for sale through Guatemalan supermarket	Dec 00/Jan 01
3. Design production and marketing interventions for remainder of program	Jan/Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
5. Create producer organization among orange growers	Feb 01
6. Assist producer group to meet bank credit requirements	Mar 01
7. Provide technical assistance to improve production	Mar/May 01
8. Formalize marketing contracts and establish packing facility	Jun – Aug 01
9. Assist producer group with marketing	Oct 01 – Jan 02
10. Institutionalize production technical assistance	Feb – May 02
11. Consolidate producer organization	Dec 02

b) Coffee production, processing and marketing

Activity	Timing
1. Review potential assistance plans with ANACAFE	Dec 00
2. Meet with informal group of producers to discuss possible AGIL assistance (working through CIF and Proyecto Tezulutlán to make contacts)	Jan 01
3. Design production, processing and marketing interventions jointly with producer representatives	Jan 01
4. Identify road improvement activities needed to facilitate coffee marketing	Jan 01
5. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
6. Create producer organization among coffee producers	Feb 01
7. Assist producer group to meet bank credit requirements	Mar 01
8. Provide technical assistance to improve production (with ANACAFE)	Mar/May 01
9. Assist producers to obtain financing for beneficios humedos and for road improvement construction	Mar/Apr 01
10. Construct beneficios humedos	May/Jul 01
11. Road improvement construction	Aug/Dec 01
12. Provide technical assistance with operation of beneficios humederos and product marketing (with ANACAFE)	?
13. Institutionalize production technical assistance	Feb/May 02
14. Consolidate producer organization	Dec 02

c) Handicraft production and marketing

Activity	Timing
----------	--------

1. Meet with groups of producers to discuss possible assistance program.	Sep 00
2. Provide technical assistance to diversify ceramic and gourd designs and to assist producer group	Oct 00/Jun 01
3. Design production and marketing interventions for remainder of program	Jan/Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
5. Provide technical assistance to diversify textile production based on assessment of market opportunities	Jan/Apr 01
6. Create or consolidate producer organizations among handicraft producers	Feb 01
7. Assist producer group to meet bank credit requirements	Mar 01
8. Provide technical assistance to improve production	Mar/May 01
9. Formalize marketing contracts	Jun – Aug 01
10. Assist producer groups with marketing	Oct 01 – Jan 02
11. Institutionalize production technical assistance	Feb – May 02
12. Consolidate producer organization	Dec 02

7. Important Complementary Program Activities

In addition to the product specific activities described above, AGIL will also provide support to improved access to credit, both via micro finance organizations and commercial banks (specifically BANRURAL). AGIL's assistance to MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Rabinal.

The primary complementary program activity that would provide valuable support to AGIL's efforts to increase incomes in Rabinal is rehabilitation or construction of farm to market access roads to get high value produce to market. Other complementary activities that would be supportive would be vocational education and literacy training for the adult population.

B. Northern Chimaltenango

For the purposes of the AGIL Program, the two municipalities of San Martin Jilotepeque and San Jose Poaquil, and portions of San Juan Comalapa, will be considered jointly and be denominated as Northern Chimaltenango area. Agronomic and cultural conditions are very similar within this region, and similar program interventions can be anticipated throughout the area. However, measurement of program impact will only be carried out for San Martin Jilotepeque, in order to reduce costs. In the following document, more information is presented for San Martin than for the rest of the area, simply because it is readily available, but as noted above the information can generally be extrapolated and applied to the entire area.

1. Development Context

a) Geographic characteristics

The Northern area of the Department of Chimaltenango is located to the northeast of Guatemala City. San Martin Jilotepeque has a total area of 251 square kilometers, and an 18.5 kilometer paved road connects San Martin with the Departmental capital of Chimaltenango and with the Inter-American highway, so movement of produce from San Martin to market is fast and reliable. San Jose Poaquil is also connected by a paved road to the Inter-American highway, via the town of Santa Apolonia. There is a decent network of roads between these municipalities and their surrounding villages (aldeas), although some of these become impassable during the rainy season. All-weather roads connect San Martin, San Jose, and San Juan, but the roads north southern Quiche need improvement to make this important connection useable during the rainy season.

The climate in the area varies from cool in the mountainous region near the municipal capital to warm in the lowland areas near the bordering rivers. Average temperature is 15 degrees centigrade (59F) in the mountains to 23 degrees Centigrade (73F) in the lower regions. The municipal capital of San Martin is 1,786 meters above sea level, and altitudes vary between 1,000 and 2,000 meters within the municipality. Soils in the area are volcanic and in general are very good for agricultural production. Although mountainous, there are many productive plains in the municipality. There is abundant water throughout the municipality, due to the presence of 37 rivers, as well as various lagoons and springs. Presently, irrigation systems cover 150 hectares, and within two years another 95 hectares will be irrigated.

Only 38% of all of the houses in the municipality of San Martin have electricity, although almost all homes in the municipal capital are connected. There are about 125 telephones in the municipality. Eighty-one percent of the homes are connected to water, and in the municipal capital it is supposedly potable, although use of bottled water is still recommended. In the aldeas it is untreated (entubada).

b) Human Resources and the Social/Cultural Context

The Instituto Nacional de Estadística (INE) estimates the population of San Martín in 2000 to be 56,000 people. The 1994 census indicated that the economically active population in San Martín was 10,063 (9,280 men and 783 women), although these figures only count women who work in formal jobs, excluding women that work at home or work on farms along with their husbands. The population of San José Poaquil is estimated at 17,000.

Sixty-nine percent of the population of San Martín and fifty-four percent of that of Poaquil live in rural areas, and eighty-eight percent of San Martín and seventy-seven percent of San José are indigenous Mayans (Kaqchiquel). The incidence of monolingual Mayan language speakers is lower in San Martín than in other parts of the Guatemalan highlands, and there are indications that many of the young people no longer speak kaqchiquel. The 1994 census indicated that 46% of the population of San Martín was illiterate, but the 1999 USAID financed Encuesta de Bienestar Familiar (carried out by the Universidad del Valle) indicated that only 26% of the population of San Martín and 31% of that of San José is illiterate, the lowest percentages found among the twelve municipalities surveyed.

There are four producer organizations or credit cooperatives in San Martín, with a total of 1,382 members. There are also two commercial banks based in the municipal capital. San José Poaquil does not have an organized cooperative organization, although there does exist an organization of coffee producers.

The 1976 earthquake flattened the principal town of San Martín and outlying communities, giving this community the distinction of having the highest mortality rate from the disaster. It also caused severe damage in San José Poaquil, killing an estimated 6,000 people. In 1980, the abduction and killing of the indigenous mayor of San Martín ushered in a period of terror for the next three years in which thousands were killed, many in the whole scale massacre tactic exercised by security forces; Choatulum and El Tablón are infamous examples of these.

c) Economic Conditions

The Encuesta de Bienestar Familiar carried out by the Universidad del Valle in 1999 with USAID funding found that 27% of those employed in San Martín were farmers, and an additional 20% were agricultural laborers (this includes people that migrate to the coast to work on large farms). Other major employment categories were other laborers (19%) and technicians and mechanics (15%). In Poaquil 28% are farmers and 16% farm workers. The average age of farmers in San Martín is 43 years, which is fourth highest among the twelve surveyed municipalities. In Poaquil it is 41 years.

Average recorded family income in San Martín in the month prior to the survey was Q1,116, while in the rural area it was Q707. In Poaquil these figures are Q1,065 and Q918. These figures are in the mid-range of the surveyed areas.

Agriculture is by far the largest economic activity in Northern Chimaltenango. Coffee production is a leading activity, producing over 400,000 cwts of coffee in cerezo (with the coffee cherry still attached) in San Martin and an estimated 80,000 in Poaquil. Other important crops include corn and beans grown for consumption, avocados, and horticultural crops (French beans, snow peas, and sweet peas). Livestock activities are generally limited to family level production of chickens, pigs, and a small number of dairy cattle. Tourism potential remains substantially undeveloped, as does the handicraft industry.

d) On-going Development Activities

A recent survey identified the following development organizations presently active in the San Martin municipality:

- Asociación de Productores de Desarrollo Integral (APDEST)
- Asociación de Desarrollo Comunitario Rural (ADECOR)
- Servicios a la Comunidad Maya
- Asociación de Desarrollo y Servicio Integral
- Asociación de Desarrollo Agrícola (ASDEA)
- Asociación Semillas de Esperanza (ADESE)
- Asociación de Desarrollo Comunitario Integral San Martineca (ADECISMA)

2. Development Opportunities and Challenges

There are a number of positive factors that favor AGIL assistance in Northern Chimaltenango. With good soils, abundant water, and a variety of micro-climates, the area can produce a wide range of agricultural products. It also is in close proximity to zones in Chimaltenango and San Juan Sacatepequez where production of high-value horticulture products for the export market has already had a significant positive impact on incomes. Improved production technology used in these neighboring regions can be transferred to San Martin and San Jose at low cost, now that the civil violence that impeded this process has ended. The region can also take advantage of the market links already developed by the agro-exporters in the neighboring communities. A relatively good road network also facilitates productive activity in the area, as transportation to market is reliable and relatively low in cost. Irrigation capacity exists in the area and is expanding, although further investment in irrigation will be required if the full potential of the municipalities is to be reached. There are a number of good artisans in the area, and this industry can be further developed with assistance in incorporating improved materials and designs, and in general the relatively high literacy levels in the area facilitate broad economic development. Finally, the area's close proximity to Guatemala City also makes tourism a potential expansion activity.

There are also several important weaknesses that must be overcome to improve incomes in Northern Chimaltenango. Although several farmer organizations exist, in general there have been more failures than successes in establishing such institutions.

This has led to considerable disillusionment with structures such as cooperatives. It is indicative that the producers in Estancia de la Virgen, in San Martin, have opted for creation of a sociedad mercantil, despite the fact that this legal structure implies higher taxes and legal fees. Secondly, access to credit is a binding constraint in the area. The Encuesta de Bienestar Familiar found that only 2% of the families in San Martin had access to credit, which is the lowest of the twelve municipalities surveyed. For Poaquil the percentage is 11%. Initial anecdotal information indicates that there may be an aversion to indebtedness in the area, probably associated with failed development programs in the past, which indicates that the low use of credit may be at least in part a result of low demand, rather than low supply. Although the road network is good, investment will be needed in marketing infrastructure (packing sheds, storage facilities, refrigerated units) once production levels justify doing so. Finally, it appears that there are few other international donor supported activities being implemented in Northern Chimaltenango, and many national development agencies, such as ANACAFE, have little presence in the municipality.

3. Investment Options Considered

There are a number of agricultural and artisan activities in Northern Chimaltenango and associated municipalities that could be supported through the AGIL program. The following presents a brief description of the potential activities identified to date:

- Horticulture production for export: As noted earlier, production of export vegetables has had a significant impact on incomes in neighboring communities. Within the San Martin municipality, production of French beans in Estancia de la Virgen during more than 15 years has demonstrated that local farmers can adopt and benefit from the practices developed by their neighbors. Presently, 100 producers in Estancia are forming an Empresa Mercantil to serve as their marketing entity. In addition, producers in the Aldea Pachay are also now becoming involved in this activity. The next phase will be to promote greater diversification of products, including asparagus, sweet peas, snow peas, and possibly broccoli. Introduction of these products will be relatively easy, as the producers are already familiar with the unusual requirements of export vegetable production. AGEXPRONT has prepared a concept paper for a project to promote 23 hectares of broccoli and snow pea production in the San Martin area, benefiting 100 producers. Similar production activities are also present in San Jose Poaquil.
- Coffee production and processing: Despite the fact that coffee prices on the world market are at historic lows, the low technology, labor-intensive production typical of the area still makes this a profitable activity. However, although the two municipalities produce over 480,000 cwts of coffee en cereza (i.e. with the fruit that surrounds coffee bean when picked still attached), the region lacks facilities to carry out the initial basic processing stage. Unless the cherry fruit is removed soon after picked, and the inner layer next to the bean removed, the bean begins to ferment and the quality of the coffee bean declines within hours.

In addition, transportation costs are increased when coffee is shipped in cereza, as the cherry fruit is wasted weight. ANACAFE has promoted construction of relatively simple, environmentally acceptable beneficios húmedos (wet processing facilities used to remove the cherry fruit and then dry the bean), which would be very appropriate to conditions in the area. Dissemination of improved coffee production technologies would also have a significant impact on improved yields and incomes. AGEXPRONT has prepared a concept paper for a project to improve coffee production and processing for 500 coffee producers in San Martín, projecting a 40% improvement in price due to processing and a significant increase in yields. It may also be possible to provide assistance with improved production and processing of coffee in neighboring communities of San Juan Comalapa and San José Poaquil, thus expanding the impact of the program.

- Handicrafts: There is a long tradition of handicrafts in Northern Chimaltenango, including textile weaving, basket making, and preparation of a typical adornment of candy wrapped in corn husks and linked in a chain. Production and profits are limited by lack of organization among the producers, limited knowledge of markets and market demand, inability to produce for mass markets, use of poor materials, and lack of access to financing required to improve production. In addition, although it is essential that traditional designs for woven textiles be maintained, as these are both a valuable element of local culture as well as in demand in the tourist market, sales could increase if the variety of designs could be diversified.
- Tourism: Since Northern Chimaltenango is easily accessible from Guatemala City, it has considerable potential to increase its tourism industry. As the roads between San José, San Martín and San Juan Sacatepequez have been improved, a circuit that would include artisan activities in these towns plus the archeological site of Mixco Viejo could become a popular tourism activity. However, in order to take advantage of this potential, improved facilities for tourists would be essential. Particularly needed would be more modern and attractive restaurants, and eventually hotels. The towns will also need to focus on building standards, and municipal trash disposal, in order to increase their attractiveness as a tourist site.

4. Strategic Choices

Fewer options were discussed in the previous section than will be seen in the strategies for other municipalities, as the choices for Northern Chimaltenango are considered to be fairly clear. The significant potential for increased incomes resulting from increased production and diversification of export horticulture products, investment in coffee production and processing, and assistance with improvements in artisan activities, is clearly greater than other alternate activities. Each of these activities meets the criteria of high value crops that can create significant increases in income for a substantial number of producers.

The “core crop model” discussed in the introduction to this strategy document clearly applies to Northern Chimaltenango. However, assistance will also need to be given to systemic improvements in access to credit and technical assistance in the area so that the level of general economic activity increases in association with the increased incomes generated by the core crop activities. Lack of access to credit is a clear constraint in San Martin and only slightly less so in Poaquil, and a viable micro-enterprise financing program is extremely important to broad based development.

The geographic focus of assistance will be primarily within the boundaries of the Municipalities of San Martin Jilotepeque and San Jose Poaquil. However, assistance will also be provided to improve the production and marketing of coffee and handicrafts in parts of neighboring San Juan Comalapa municipality.

5. Financial service providers

Both ACT and MUDE (Asociación Mujeres en Desarrollo) have received AGIL grants to expand their micro finance lending programs into San Martin. MUDE is also seeking access to BANRURAL’s second-tier lending resources, with assistance from the AGIL program. Assistance may also be provided to a FENACOAC affiliated savings and credit cooperative located in San Juan Sacatepequez to establish a branch office in San Martin. Training and technical assistance will also be provided to BANRURAL’s agencies serving the Northern Chimaltenango region, as part of the overall AGIL support to that institution, in order to improve the efficiency of their operations and to diversify their lending instruments and procedures. BANCAFE is also planning to extend its micro lending program into its Chimaltenango agency this year, which will eventually have an impact of service availability in the northern part of the department. Finally, as credit needs are identified as part of the assistance provided to producer groups as outlined in section 4 above, these organizations will be assisted in meeting the financial institutions’ credit requirements.

6. Implementation Timeline

Detailed implementation plans will be developed with producers in Northern Chimaltenango, but the following presents an initial plan of activities to be carried out to develop the selected economic activities, and a timeline for their implementation:

a) Production and diversification of export horticulture

Activity	Timing
1. Meet with informal group of Estancia de la Virgen producers to discuss possible quick action market intervention.	Aug? Sep? 00
2. Carry out quick action market intervention, assisting with French bean production and marketing	Oct 00/Jan 01
3. Design production and marketing interventions for remainder of program for the Northern Chimaltenango area..	Jan/Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01

5. Formalize producer organization among Estancia de la Virgen growers and organize similar groups elsewhere in the area.	Feb 01
6. Provide technical assistance to improve and diversify production	Mar/May 01
7. Assist producer groups to meet bank credit requirements	Mar 01
8. Formalize marketing contracts and establish packing facilities	Jun – Aug 01
9. Assist producer groups with marketing	Oct 01 – Jan 02
10. Institutionalize production technical assistance	Feb – May 02
11. Consolidate producer organizations	Dec 02

b) Coffee production, processing and marketing

Activity	Timing
1. Review potential assistance plans with ANACAFE	Dec 00
2. Meet with informal groups of producers to discuss possible AGIL assistance	Jan 01
3. Design production, processing and marketing interventions jointly with producer representatives and ANACAFE	Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
5. Create or consolidate informal producer group or groups among coffee producers	Feb 01
6. Provide technical assistance to improve production (with ANACAFE)	Mar/May 01
7. Assist producer group(s) to meet bank credit requirements	Mar 01
8. Construct beneficios humedos	May/Jul 01
9. Provide technical assistance with operation of beneficios humedeos and product marketing (with ANACAFE)	?
10. Institutionalize production technical assistance	Feb/May 02
11. Consolidate producer organizations	Dec 02

c) Handicraft production and marketing

Activity	Timing
1. Meet with groups of producers in San Juan Comalapa to discuss possible assistance program.	Sep(?) 00
2. Provide assistance to producer group to improve production technology	Oct 00/? 01
3. Design production and marketing interventions for remainder of program for Northern Chimaltenango region.	Jan/Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
5. Provide technical assistance to diversify handicraft production based on assessment of market opportunities	Jan/Apr 01
6. Create producer organizations among handicraft producers	Mar 01
7. Assist producer group to meet bank credit requirements	Mar 01
8. Provide technical assistance to improve production	Mar/May 01
9. Formalize marketing contacts	Jun – Aug 01
10. Assist producer groups with marketing	Oct 01 – Jan 02
11. Institutionalize production technical assistance	Feb – May 02
12. Consolidate producer organization	Dec 02

7. Important Complementary Program Activities

In addition to the product specific activities described above, AGIL will also provide support to improve access to credit, via micro finance organizations and commercial

banks (specifically BANRURAL and other commercial banks). AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Northern Chimaltenango.

General economic activity would also increase if a direct all-weather road link existed between San Martin and San Jose, and between these towns and Joyabaj in southern Quiche Department, and eventually with productive areas north of Joyabaj (Canillá and Uspantan). Improvement of a five kilometer stretch between San Martin and San Jose is needed to reduce transportation costs in the area. The first stage of the connection between these towns and Southern Quiché would require construction of a bridge between San Martin and Joyabaj. Reportedly, the GOG is committed to building this road link. Other complementary activities that would be supportive would be vocational education and literacy training for the adult population.

C. San Miguel Uspantan

1. Development Context

a) Geographic Characteristics

San Miguel Uspantan is located in the mid to northwestern part of the Department of Quiché, and has a total area of 865 square kilometers. An all-weather road connects Uspantan to Sacapulus, 51 kilometers to the west, and then on by paved road to Santa Cruz del Quiché and the Inter-American highway. All-weather roads also connect Uspantan with San Cristobal, Alta Verapaz to the east and via Sacapulas to Huehuetenango to the west, and this connection is to be paved within two years. Finally, there is a proposal under review with the GOG to establish an all-weather secondary road connection between Uspantan and Camilla, Joyabaj, San Martin Jilotepeque, and Chimaltenango to the south. If this road were constructed, travel time between Uspantan and its major markets would be greatly reduced. Within the municipality, road communication is weak, as only 54 of the 152 communities are connected by road. A road connects Uspantan to within 8 kilometers of a road coming south from Playa Grande in Ixcán, next to the border with Mexico, but it is a difficult road any time of year, and often not transitable in the rainy season,

Uspantan includes dramatically different geographic zones, from tropical lowlands in the north to the Chamá mountain range in the middle and dry zones in the South. Elevations vary from 80 meters above sea level in the north to 3,000 meters in the central region, with the municipal capital at 1,825 meters. Temperatures vary accordingly, from an average of 32 degrees Centigrade in the northern lowlands (90 degrees F) to 17 degrees Centigrade in the mountains (63F). Soil quality also varies greatly in the municipality, from low-fertility lime soils in the north to very fertile volcanic soils in the productive mid-regions.

Water is abundant except for the highest mountain ridges, although annual rain patterns have varied considerably over the past five years. The northern region (just south of Ixcán) has numerous important rivers. And the Rio Chichoy forms the southern and eastern borders of the municipality. There are eight irrigation systems in Uspantan, and several more are planned for construction over the next five years.

Outside the municipal capital, only fifteen villages (10% of the total) have electricity, and only 36 have water service (24% of the total). There are only 49 telephones in Uspantan.

b) Human Resources and the Social/Cultural Context

The population of the Uspantan municipality is estimated at 44,675, of which 90% live in rural areas. Seventy-four percent of the population is Mayan, and speak three Mayan languages, Kiche, Q'eqchi, and Uspanteko. There are many monolingual Mayan speakers. Twenty-six percent of the population was classified as economically active

population at the time of the 1994 census (6,915 people out of a population at that time of 26,184). It is clear that there has been significant in-migration since the signing of the Peace Accords. However, it is also estimated that 20 to 25% of the population of Uspantan migrates to the south Coast to work on coffee and sugar cane harvesting. In 1994, 68% of the adult population was classified as illiterate. An analysis of school attendance in Quiché Department ranked Uspantan as second worse, with 87% of the eligible population (by age) not attending primary school, and 95% of the eligible population not attending “ciclo básico.”

There are six producer organizations located in the municipality, with between one and ten years of activity. Total membership in these organizations is 360 persons. All of the organizations focus on production and/or marketing of horticulture products.

Uspantán was an early site of army repression, beginning in 1979, when nine indigenous campesinos involved in a land rights movement were executed. Protests over this killing escalated, culminating in the January incident involving the Spanish Embassy in Guatemala City, where 37 people, mostly Uspantecos (including Rogoberta Menchu’s father and the Guatemalan Minister of Foreign Relations) were incinerated during the police assault on the Embassy the day the protesters took over the Embassy. Continued violence plagued Uspantán during the worse period of the war (1980-1983), especially in the aldeas located in the Zona Reina lowland region.

c) Economic Conditions

Agriculture is the leading economic activity in Uspantan, with corn and beans produced in two-thirds of the communities within the municipality. Cardamom is produced in 40% of the villages, and sugar cane, vegetables, and fruits are the other leading products. Vegetable production has grown significantly in the central, east, and southern areas of the municipality, and has become an important economic activity. Livestock production is the second leading economic activity, with cattle raising practiced in 46% of the communities, with pigs, sheep, and goats tended in over a third of the villages. Handicraft production is third in importance in the region, including production of pots, comales, bricks and roofing materials from clay, as well as typical textiles. However, artisan goods are produced primarily for local use rather than export to other regions.

San Miguel Uspantan has been considered one of the poorest municipalities in Guatemala in various GOG planning documents since the mid-1990s. Principal causes of the extreme poverty can be attributed to the area’s isolation and the impact of several decades of armed conflict, both of which have discouraged private investment and technology transfer.

d) On-going Development Activities

According to the 1999-2004 Plan de Desarrollo Municipal, there are the following organizations implementing development activities in San Miguel Uspantan:

- PAF MAYA: Technical training
- Alianza para el Desarrollo: Community organization, health, sanitation, food aid, family economic activities, productive activities, and environmental activities.
- Programa Quiché: Agricultural and livestock activities, micro-enterprise credit, productive and social infrastructure, education, health, community participation and potable water.
- UNEPROCH: Soil conservation, forest nurseries, and reforestation.
- MOVIMONDO MOLISV: Institutional strengthening, agricultural production, health, education, gender issues, environmental issues, and human rights.
- Cooperativa Estrella del Norte: Savings and loan cooperative.
- OFPLAM: Municipal planning technical assistance and design of community projects.
- FONAPAZ PRODERQUI Program: Integrated rural development, productive projects, community social infrastructure.
- Cooperativa San Miguel Arcangel: Credit, consumer store, and agricultural and livestock center.
- Cooperativa Magdalena Milpas Altas: Export of non-traditional vegetables.

2. Development Opportunities and Challenges

There are a number of factors in Uspantan that will facilitate the work of the AGIL Program. The wide range of economic zones creates a basis for diversified agricultural production, particularly in the central region near the municipal capital and along the roads to its east and west. The abundance of water and good soils in the central region create excellent conditions for production of export vegetables, and the northern region of the municipality has very good conditions for cardamom production. With work to begin soon to pave the road between Uspantan and both San Cristobol to the east and Huehuetenango to the west, access to markets will become less expensive and more reliable. There are a number of organizations that are active in Uspantan with which the program can coordinate its initiatives, which will enable it to have a quick impact. There are also several resourceful private marketing agents that are active in the Uspantan area, who are providing leadership to the effort to diversify the agricultural economy.

However, there are also a number of constraints to the development of the municipality. Perhaps the biggest constraint is weak infrastructure, with only a third of the villages accessible by road, and with a long and at times unreliable road connection between the municipality and its principal markets. Agro-processing infrastructure is also very undeveloped. The extremely high rates of illiteracy and the poor school attendance statistics also indicate that the population has few skills that would enable them to diversify their economic activity. Access to financial services in the municipality is also very weak, despite the presence of a BANRURAL branch office. Finally, the fact that in certain areas the population is predominantly monolingual in one of three Mayan languages makes communication and technology transfer much more complicated.

3. Investment Options Considered

- Horticulture: There have been several successful experiences in Uspantan with production of export vegetables, specifically French beans and sugar peas. Several private marketing agents, including the Cooperativa Magdalena Milpas Altas and a private Guatemalan entrepreneur, have provided intensive technical support and contracted purchase of produce from informal producer groups, at prices considered favorable in comparison with other market options. Production of French beans is now a year-round operation, with 300 producers farming irrigated land in three municipalities. Production of snow peas is a more recent initiative, in an area slightly higher than the French bean growing area. Based on this experience, AGIL can assist producers and marketers to further expand their activities and to diversify into other horticulture products, like asparagus and broccoli. In addition, this area could also produce vegetables for regional markets (primarily El Salvador), especially once the road network has been improved.
- Cardamom: Cardamom is grown in the northern region of Uspantan, part of which is accessible from Uspantan and part from Ixcan. If the GOG constructs the remaining 8 kilometers of road required to link these two zones, and improves the existing sections of these roads so that they are transitable in all-weather conditions, then all of the produce could be shipped out via Uspantan Municipality. However, even without improvements to the road, significant quantities of cardamom are already marketed via Uspantan. The ASOBAGRI association in Barillas has demonstrated that export of organically grown cardamom can be profitable. The cardamom producers in northern Uspantan, like those in Barillas, have not had access to chemical fertilizer and pesticides and can easily be certified as organic producers. However, assistance is needed to improve product quality, productivity, and post-harvest handling. In addition, assistance will be needed to link the producers with the market for organic produce. Another option that may offer potential is to produce cardamom oil for export.
- Persian limes: Thirty-four members of the Asociación de Productores para el Desarrollo Uspanteco (APRODUS), which is based in Sicaché but has activities in a number of towns including the municipal capital, have planted 13.2 hectares of Persian limes. This is considered a pilot initiative with plans to expand to more producers and more land. The land being used has a small irrigation system, but this needs to be modified to a more appropriate drip irrigation system. Assistance is also needed with product marketing, including construction of a sorting and packing shed and preparation and implementation of a marketing strategy.
- Organic potatoes: The fifty members of the Comité Promejoramiento de la Aldea El Coralito, Uspantan, have produced organic potatoes for a number of years but have had difficulty with marketing the product and obtaining a price premium. Technical assistance is needed to assist with marketing the product directly through channels that will reward the producers for their niche product.

- Avocado marketing: Sixty members of the Alianza para el Desarrollo, San Miguel Uspantan, have planted 14 hectares of avocado, but have no plan for marketing the avocados once the trees begin to produce. The AGIL program could carry out a feasibility analysis of their project and help them to identify markets if it is determined that the activity is justified. The construction and/or paving of roads between Uspantan and its markets may be a critical factor in the marketing of the projected produce.
- Artisan products: Clay pots and comales, and wood articles, are being produced in Uspantan, and there is potential to expand and diversify these industries. Training is needed to improve artisan skills, and assistance with product design and marketing is also needed. There are an estimated 300 producers of clay pots and comales, and there are about 80 carpenters that employ an estimated 400 helpers and sales people.
- Ornamental plants: The climate, soils, and access to water make Uspantan an attractive candidate for production of ornamental plants, especially once the road connections to markets have been improved.
- Agro-forestry: Valuable research has been carried out by the Cooperative Housing Federation (CHF) in Ixcan of various combinations of agricultural and forestry activities that offer potential for improved incomes as well as preservation of the fragile soils that characterize the northern areas of Uspantan. Dissemination of these technologies from Ixcan into the contiguous zones of Uspantan would have a positive impact on the incomes in that area. Two crops used in these agro-forestry trials that could have considerable potential are black pepper and allspice.
- Other products: Other possible activities include production of raw, brown sugar, and production and processing of garlic and onions.

4. Strategic choices

Based on a review of the investment options and the strategic approaches available to the AGIL program to meet its objectives within its time horizon, the one product that clearly meets the criteria of a high value product that can create significant increased income for a substantial number of producers is production and export of horticulture products. The experience already gained with these products over the past ten years, and the potential to expand and diversify this activity, clearly warrants AGIL support.

Selection of other priority investment options is more difficult. Assistance to improve the productivity, quality, processing, and marketing of cardamom is probably an attractive activity, and an implementation plan for this assistance is included below. However, further analysis of the location of the producers, their accessibility, and the technical inputs that are required is needed before a final decision can be made. Also,

cardamom prices are currently very low. Assistance to artisan producers may prove to be an important activity, considering the number of people reportedly dedicated to these activities, and an implementation plan is also included for this activity. However, further information is needed on the status of these operations and the assistance required before a final decision can be made. Finally, agro-forestry may also offer important opportunities, but assistance to the lowland Uspantan region can be undertaken from Ixcán as a parallel effort with activities in that municipality, rather than as part of the Uspantan strategy.

The other economic activities discussed tend to involve small numbers of producers, so the impact of assistance would be limited. However, depending on further analysis of the potential impact of assistance with cardamom and artisan production, it may be appropriate to apply the “multiple economic activity model,” described in section II above, in the case of Uspantan. Rather than providing intensive assistance to two or three activities, greater benefit may be achieved by providing more limited assistance to a broader range of activities in addition to core support for horticulture production and marketing. Assistance required by Persian lime, avocado, organic potato, and possibly cardamom growers is basically the development of a marketing strategy and plan, and limited investment in market infrastructure. Targeted technical assistance could be provided to meet this need. Once more experience is gained with these activities, an assessment can be made as to whether more intensive support would be justified, and the AGIL strategy could be modified accordingly.

The geographic focus for these activities would be throughout the Uspantan municipality, but will also include horticulture activities in neighboring municipalities to the east and west of the town of Uspantan.

5. Financial service providers

The only national level financial service organization with a present or planned presence in Uspantan is BANRURAL. The BANRURAL agency in Uspantan reportedly provides services to 20,000 clients, including both micro entrepreneurs and farmers. This agency will receive training and technical assistance support via AGIL assistance to BANRURAL, and may be selected as a “model agency,” which would make it a training site for staff from other agencies.

Other than BANRURAL, AGIL support will need to focus on existing non-governmental organizations in Uspantan that provide financial services. AGIL will work with FENACOAC (the national credit union federation) to obtain technical support service for an existing savings and credit cooperative in Uspantan, Estrella del Norte. Another Uspantan organization that could receive assistance under the program is the San Miguel Arcangel multi-service cooperative.

The paucity of micro finance services in Uspantan is a concern for the program, and the program will seek additional avenues of service delivery during program implementation.

6. Implementation Timeline

Detailed implementation plans will be developed with producers in Uspantan, but the following presents an initial plan of activities to be carried out to develop the selected economic activities, and a timeline for their implementation:

a) Production and diversification of export horticulture

Activity	Timing
1. Meet with informal groups of producers and private market agents to discuss potential for diversification and expansion.	Dec 00
2. Design production and marketing interventions for remainder of program, both in existing production area and in other zones.	Jan/Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
4. Formalize producer group to be assisted by program	Feb 01
5. Provide technical assistance to improve, diversify, and expand production	Mar/May 01
6. Assist producer groups to meet bank credit requirements	Mar 01
7. Formalize marketing contracts and infrastructure for new producer groups	Jun – Aug 01
8. Coordinate marketing assistance with producer groups and market agents.	Oct 01 – Jan 02
9. Institutionalize production technical assistance	Feb – May 02
10. Consolidate producer organization	Dec 02

b) Cardamom production, processing and marketing

Activity	Timing
1. Meet with informal group of producers to discuss possible AGIL assistance	Jan 01
2. Design production, processing and marketing interventions jointly with producer representatives	Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
4. Create informal producer group among cardamom producers	Feb 01
5. Provide technical assistance to improve production	Mar/May 01
6. Assist producer group to meet bank credit requirements	Mar 01
7. Construct processing facility	May/Jul 01
8. Provide technical assistance with processing and product marketing (possibly with support from ASOBAGRI association)	?
9. Institutionalize production technical assistance	Feb/May 02
10. Consolidate producer organization	Dec 02

c) Handicraft production and marketing

Activity	Timing
1. Meet with groups of producers in Uspantan to discuss possible assistance program.	Jan 01
2. Design production and marketing interventions for remainder of program	Jan/Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
4. Provide assistance to producer group to improve production technology	Mar/Jun 01
5. Provide technical assistance to diversify handicraft production based on	Mar/Jun 01

assessment of market opportunities	
6. Create producer organizations among handicraft producers	Jun 01
7. Assist producer group to meet bank credit requirements	Jun 01
8. Formalize marketing contacts	Jun – Aug 01
9. Assist producer groups with marketing	Oct 01 – Jan 02
10. Institutionalize production technical assistance	Feb – May 02
11. Consolidate producer organization	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Uspantan.

General economic activity will also increase once the road connecting San Cristobol and Huehuetenango, via Uspantan, has been paved. In addition, if the GOG decides to construct an all-weather road linking Uspantan and Chimaltenango, via Canillá, Joyabaj, and San Martin Jilotepeque, this would greatly improve Uspantan's market access. Construction or improvement of farm to market roads within Uspantan municipality is also very important, considering that only a third of the villages presently are connected to the municipal capital. Other complementary activities that would be supportive would be vocational education and literacy training for the adult population.

D. Santa Maria Nebaj

1. Development Context

a) Geographic characteristics

Santa Maria Nebaj is located in the northwestern section of the Department of Quiché, and has a total area of 607 square kilometers. Nebaj serves as the market link for the entire Ixil region, a group of three municipalities (Nebaj, Chajul, and Cotzal) that encompass the Ixil speaking Mayan Indians. This strategy will focus on the potential for AGIL program support throughout the combined Ixil region, since any improved economic activity in the region will directly or indirectly improve rural incomes in Nebaj. Where possible, data on all three municipalities will be provided. Chajul is the largest of the three municipalities, with 722 square kilometers, while Cotzal is the smallest, with 234 square kilometers. The 1,563 kms² of the entire Ixil-populated surface area represents almost 20 percent of the total land area of the Department of Quiché. The broken topography of the region is due to the region's location on the eastern part of the Cuchumatán massif. There are very few areas with flat land for farming, and these occur mainly along riverbeds. The town of Nebaj has an elevation of 1,907 meters, and elevations vary between 80 and 3,000 meters.

Nebaj is connected by a 34-kilometer tertiary dirt road to Sacapulus in central Quiché, where a paved highway connects to the departmental capital and on to the Inter-American highway. The Nebaj-Sacapulus road deteriorates during the rainy season, requiring use of four-wheel drive vehicles, and is occasionally blocked by landslides. All-weather roads connect Nebaj with neighboring Chajul and Cotzal. After that the roads are less reliable as they connect to other towns before reaching a dead end.

Rainfall is abundant: Nebaj averages 1.9 meters annually, and parts of Chajul have over 4.5. The mean annual humidity is 77 percent. Temperatures vary from cool to warm, depending on elevation. There is an abundance of small and medium-sized rivers in the area, with 31 rivers in Nebaj alone. Soils have medium to high fertility levels and good drainage, although particularly in the lower regions they are fragile and easily erode if the vegetative cap is removed. There are eleven micro irrigation systems in the Nebaj municipality.

Electricity is available in the town of Nebaj and 12 of the other 106 settlements in the Nebaj municipality. Potable water is only available in the town of Nebaj, although water is piped to a number of other towns. There are only 41 telephone lines in Nebaj.

b) Human Resources and the Social/Cultural Context

The combined population of the Ixil region according to the 1994 census was 67,243 inhabitants (Nebaj 33,855, Chajul 19,251, Cotzal 14,137). Since 1994 it is likely that this population has grown substantially, due to return of those Ixil who fled the region during the armed conflict, and the settlement of others in the lowland region in the

northern part of the municipalities. Eighty-two percent of the Nebaj population is classified as rural, and this percentage is probably higher for Chajul and Cotzal. In terms of ethnic composition, the 1994 National Census determined that 90.9 percent of the population was indigenous. Cotzal has the greatest proportion of indigenous peoples, with 95 percent; Chajul has 89.5 percent indigenous, and Nebaj 90.5 percent. Although the Ixil language, by far, is the predominant language spoken, about 20 percent of the population in the Ixil Triangle report being native speakers of Spanish. There are considerable numbers of K'iche' speakers in the region. Cotzal has the greatest proportion of these K'iche' speakers (21 percent), followed by Chajul (18 percent) and Nebaj (14 percent).

The literacy rate for heads of households in Nebaj (38 percent) is lower than the average for the other ten municipalities targeted by the AGIL program. Similarly, attendance in school at some point in life is lowest for household heads in Nebaj than in most of the other communities - over 72 percent have never had any schooling, versus a 55 percent rate for the other towns. This phenomenon may be explained by the flight from formal settlements people took when violence engulfed the region. In the Ixil region, many thousands of families remained living in the mountains for years resisting Army efforts to nucleate the population into "model villages," and probably for that reason many who are now household heads did not have a childhood school experience. For the current population of school age children (aged seven to 14 years), the pattern is not quite as bleak. The attendance factor for Nebaj is slightly higher than average (81.3 percent versus 73.6 percent). A breakout by gender shows that Nebaj has a highly skewed distribution of girl's participation in school. While only 17 percent of school age boys do not attend school, the percentage for girls is a substantial 28 percent (contrasted to the general sample, where 23 percent of boys and 29 percent of girls were found to be non-attendees).

There are nine local producer organizations in Nebaj, with a reported total membership of 2,067 people. The largest of these is the Cooperativa Todos Nebajenses, which has functioned for ten years providing credit and other services, and the other organizations provide similar services. There is also a large, successful, coffee producer cooperative with approximately 3,500 members based in Chajul.

The Ixil region was one of the most severely affected in Guatemala during the period of conflict. The Guerrilla Army of the Poor (EGP) was successful in organizing Ixil combatants by the mid-1970s. By late 1979, the EGP controlled a considerable amount of territory in Quiché, and in the Ixil region were able to operate quite freely. The Guatemalan Army had difficulty sending troops and supplies into the area because the guerrillas carried out devastating ambushes against convoys moving along the precipitous and winding road from Sacapulas.

Beginning in 1981, the Army increased its counterinsurgency measures by attacking civilian members of the Ixil population. Brutal shock tactics, including the indiscriminate massacre of villagers, drove the guerrillas and civilians farther into the hills. The organization of civil defense units (PACs), under Chief of State Gen. Ríos Montt, and

the construction of “model villages” served to consolidate Army control of the region. Sweeps through the mountains by the civil patrol units netted dozens of people at a time, and these people were then forcibly brought into the newly created town centers, the model villages.

After restitution to a civilian government in 1986, a substantial relief and reconstruction effort in the Ixil region took place. The European Economic Community was a principal international partner with the Guatemalan Government in restoring some semblance of economy in the region. A number of non-government organizations with funding from the United States and other countries have been involved in the Ixil region in the effort to get the inhabitants into a sustainable economic platform again. In Nebaj alone, the USAID NEXUS project identified a number of development committees in operation. There are at present 55 ‘territorial’ committees, 24 functional development committees, and nine ‘traditional’ committees, most of which are working with some governmental agency, donor organization, or NGO.

c) Economic conditions

The principal economic activity in the Ixil triangle is agriculture. In Nebaj municipality, 22% of people indicated agriculture as their occupation in the EBF survey, and an additional 36% indicated that they were agricultural workers (including many who migrate for seasonal employment on large farms). The Ixil region is a major source of migrant labor within Guatemala, providing more workers than most of the other target municipalities combined. The average age of small farmers in Nebaj is only 38 years, nearly the youngest in the targeted municipalities. The effects of the period of armed conflict and the homeless trek endured by the Ixil communities probably explain the skewed age pattern.

Average recorded family income in the month prior to the EBF study was only Q726, the lowest after San Mateo in the targeted areas. Rural income was only Q562, which is less (in US dollar equivalent) than a Peace Corps Volunteer’s living allowance over thirty years ago.

The principal crops in Nebaj are basic grains (corn and beans), and cool climate vegetables (cabbage, carrots, broccoli, beans, potatoes, onions, garlic, tomatoes, chiles, etc.). A growing export vegetable industry sprung up on small-irrigated plots during the early to mid-90s, and showed signs of becoming highly successful. However, the only crop grown was broccoli, and when the export market for that product become oversold, activities in Nebaj ceased. Small livestock animals are also raised in rural Nebaj, but not on an extensive scale. Coffee is also produced in Nebaj, and more so in neighboring Chajul and Cotzal.

After agriculture, handicrafts are the next main source of employment. There are over 2,000 registered artisans in Nebaj that work full time producing various handicrafts, and it is estimated that an additional 3,000 people are supported indirectly by artisan activities. Forestry could be a major source of income in Nebaj, but few of the forests

are managed according to a sustainable plan. Tourism is also a potential industry, but more investment is needed in accommodations, given the Ixil's isolation.

d) On-going Development Activities

A recent review of conditions in Nebaj identified the following development programs that are active there:

- Alianza para el Desarrollo: Provides technical and financial assistance to productive projects.
- CARE: Promotes communal banks.
- Proyecto Quiché: Support for infrastructure improvement and productive projects.
- MOVIMUNDO-MOLIV: Provides organizational strengthening technical assistance.
- INAB: Local office in the Ixil region of the GOG regulatory institution for forest management
- BANRURAL: Banking transactions.

2. Development Opportunities and Challenges

The development environment in Santa Maria Nebaj offers appropriate conditions for the AGIL program, although careful attention will be required to assure that activities undertaken are appropriately targeted. For the Ixil region to progress, it is very important that the road connecting Nebaj with the paved road in Sacapulus be improved to allow safe and reliable all-weather usage. Once the infrastructure in the region has been improved, and appropriate hotel and restaurant facilities are built, tourism may be a leading industry that will lift Nebaj and its neighboring communities out of poverty. The natural beauty of the region, combined with the beauty of the Ixil culture and handicrafts, could attract large numbers of tourists. If this stage is reached, however, it will be long after the AGIL program has ended. In the meantime, AGIL will need to focus its investments on other prospects. However, to the extent possible, it will be important to try to lay the groundwork for this industry.

The opportunity to take advantage of agricultural production is more pronounced in Chajul, where high quality coffee is produced, but it is also an important activity in Nebaj and Cotzal. Within Nebaj, good agricultural land is generally found near riverbeds, where sufficient flat land and water are available for production. These areas do in fact offer opportunities for increased incomes, as was experienced during the broccoli boom of the mid-90s, but they are now underutilized.

There are some reports that the intensive effort to develop the Ixil region over the past decade, led primarily by European donors, has made the area more difficult for new initiatives. In some areas this is manifested as a disillusionment with outsiders promising development, and in other areas it is shown in the attitudes of the recipients, who expect the donors to do everything, requiring little effort on their part. It is very important that the AGIL program keep expectations realistic, and lay clear ground rules

from the beginning concerning the responsibilities of both the program and the recipients.

Finally, for this region to progress, the basic issues of illiteracy and lack of basic infrastructure (electricity, water, etc.) must be addressed.

3. Investment Options Considered

There are several existing agricultural and artisan activities that could be supported through the AGIL program. The following presents a brief description of the potential activities identified to date:

- Coffee: According to a monograph prepared by AGEXPRONT, there are 10,000 coffee producers in the Ixil region, 42 percent of whom are in Chajul, 33 percent in Nebaj, and 25 percent in Cotzal. However, the local ANACAFE technician resident in Chajul indicates that the total number is not more than 1200. Chajul in particular produces very high quality coffee. The Asociación Chalulense has been successful in organizing 3,500 producers (about 1100 of which produce coffee) and providing them with needed services. There are two other coffee cooperatives in the Ixil, the Cooperativa Integral Agrícola Solidaridad Ixil (with an organic coffee certificate for 22 hectares), and the Cooperativa Río Bañado de Nebaj (with 6.6 hectares). During the period of armed conflict, most of the coffee farms were abandoned, and it is now possible to reclaim and rebuild these fields using organic production technology. Much of the coffee is grown in isolated areas and the harvest is hauled out on the producer's back. Construction of farm to market access roads would greatly assist this industry.
- Horticulture: As noted above, there are a number of un- or underutilized micro irrigation systems that at one point produced a high value export crop (broccoli). It may be possible to return this land into production if an appropriate product is identified, and a viable market outlet developed. It would be very useful if a private marketing agent could be recruited to provide leadership to this effort. Improvements to the road link between Nebaj and Sacapulus may be needed before this activity is viable, unless adequate cold storage facilities are built in Nebaj.
- Handicrafts: Textiles produced in Nebaj have a fairly good market outlet as tourist items in Guatemala. In fact, many of the textiles are sold by Ixils themselves, who live in other communities - Ixils who fled the violence and who assumed residence in other communities in Guatemala, and for various reasons have chosen to remain. It is estimated that there are over 3,000 producers of mostly back-strap cloth with interwoven designs. The European Union's Proyecto Quiché is experimenting with new designs in the town of Tzabal. The weaving done by this group is on doublewide foot looms, allowing for the production of bedspreads, a specialty product that has significant appeal in international markets. There are also a number of other handicraft items produced, varying from napkins to hats, and the carpentry industry in Nebaj offers great potential, considering the excellent woods found in the

area. The limiting factor is that the producers can rapidly produce more goods than the typical market can absorb. Either cost must be lowered, new markets identified, or the products need to be diversified.

- Medicinal plants: Medicinal plants are being produced by an organization known as APAPTIX (Asociación de Promotores Pecuarios del Triángulo Ixil). APAPTIX is primarily an organization of agricultural and livestock “promotores,” basic level technical service providers. It may be economically feasible to create a processing plant to produce oil extracts for the naturopath specialty market. Additionally, there are some small farmers that have experimented with *tillantsia* for the ornamental plant export market.
- Garlic, onions and tomatoes: These products are grown by small groups of producers who are constrained by ineffective market contacts. However, the tomato market is notoriously unstable, and it appears that Guatemalan garlic producers have been unable to compete successfully against Mexican and Chinese exports, and further analysis of the feasibility of these investment options is required.
- Sheep: The raising of sheep in the northwestern portion of Nebaj holds promise. Already there are a number of families raising sheep in the areas of Salqui and Palob, but the genetic pool is small and poor. The flocks could be improved through artificial insemination, better grazing practices, and disease prevention measures. APATIX provides technical assistance to these producers.
- Dairy: Dairy was once a viable industry in the region, and the most notable center of production is in the town of Acul, within the *municipio* of Nebaj. The Azzari family manufactures cheese that is sold regionally and has a marketing outlet in Guatemala City. Members of the Azzari family show interest in increasing cheese production, purchasing milk beyond what their domestic herd produces. Most of the other dairy produces are located in the same Acul valley. However, the total number of producers and cows presently appears very small.
- Agro-forestry: As in Uspantan and Chisec, agro-forestry systems recently developed by CHF in Ixcán may have potential for production in the lowland areas in the northern portion of the Ixil municipalities.

4. Strategic choices

Assistance to coffee producers appears to be a logical undertaking for AGIL, although further work is needed to determine the type and scale of interventions needed. ANACAFE has a permanent presence in Chajul, and this staff could provide guidance on how to undertake this activity. The existing ANACAFE representatives indicate that the Asociación Chajulense and other organizations provide excellent marketing services, but additional technical assistance is required to improve coffee productivity in order to increase or even maintain incomes in today's over-supplied world markets.

It also seems likely that horticulture production on mini-irrigation plots, and handicrafts offer potential. Again, though, a closer examination of the potential for improvements in production and marketing is needed before the program fully commits itself. In the case of horticulture, it would be very important first to attempt to interest an experienced entrepreneur with knowledge of markets and technology, and who could share a portion of the risks (and profits) of such an investment. In the case of handicrafts, expert assistance is needed to assess the work done to date by the Proyecto Quiché, as well as the potential for this industry, and to develop a more detailed strategy and plan of action. AGIL has already provided some assistance to an association of weavers (Las Tejedoras) and to a group of hat makers, but a more detailed assessment of the viability of these enterprises and development of a business plan is required before further assistance is provided.

The other activities mentioned, with the possible exception of agro-forestry, are not likely to meet the program's criteria of high value products with the potential to significantly raise incomes of a substantial group of people. However, if one or more of the three activities noted above proves, on further examination, to be not worth the investment of AGIL time and money, then the program may need to shift to the "multiple economic activity model" described in Section II. At that point, limited assistance to these other options may be warranted.

5. Financial Service Providers

Both BANRURAL and BANCAFE have agencies in Nebaj, and BANRURAL plans to open an additional one in Chajul. The BANRURAL agency or agencies will benefit from technical assistance and training that will be provided to all Zonapaz agencies, as well as from assistance provided at the central offices with development of new procedures and financial instruments. BANCAFE does not at this point contemplate extension of its micro finance program to Nebaj, but eventually it will likely provide these services (though perhaps after the AGIL program has concluded).

FAFIDESS (Fundación de Asesoría Financiera a Instituciones de Desarrollo y Servicio Social – a national level micro finance PVO) expanding its activities into Nebaj, and it will utilize new Palm Pilot based loan application and monitoring techniques developed under an AGIL program grant.

The AGIL program will also encourage and possibly support provision of technical assistance by FENACOAC to a small savings and credit cooperative located in Nebaj, "El Multiplicador," and possibly also to a large multi-service cooperative "Todos Nebajenses." The latter organization has 1300 members, but approximately 20% of its loan portfolio is delinquent.

AGIL has also provided assistance to a small association of Mayan Ixil women (AMMI), which provides micro finance loans to nearly 200 women. In addition to support for improving the organization's accounting and information systems, AGIL assisted the group to access second tier lending from BANRURAL. Further assistance to this

organization, as well as to several others (APAPTIX and Las Tejedoras) will first require development of a long-term business development plan.

Finally, AGIL is working with an organization of both formal and informal credit organizations to create a “Central de Riesgos” in Nebaj, patterned after a similar organization in Sololá. This organization would serve as a credit bureau that would exchange information on borrowers among participating organizations.

6. Implementation Timeline

Detailed implementation plans will be developed with producers in Nebaj, but the following presents an initial plan of activities to be carried out to develop the selected economic activities, and a timeline for their implementation:

a) Production and diversification of export horticulture

Activity	Timing
1. Recruit private market agent to assist and guide program.	Dec 00
2. Design production and marketing interventions for program with active participation of potential producers.	Jan/Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
4. Establish producer organization among growers	Feb 01
5. Provide technical assistance to improve and diversify production	Mar/May 01
6. Assist producer group to meet bank credit requirements	Mar 01
7. Formalize marketing contacts and establish packing facility	Jun – Aug 01
8. Assist producer group with marketing	Oct 01 – Jan 02
9. Institutionalize production technical assistance	Feb – May 02
10. Consolidate producer organization	Dec 02

b) Coffee production, processing and marketing

Activity	Timing
1. Review potential assistance plans with ANACAFE	Dec 00
2. Meet with informal group of producers to discuss possible AGIL assistance	Jan 01
3. Design production, processing and marketing interventions jointly with producer representatives and ANACAFE	Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
5. Create informal producer group among coffee producers (or work through existing organizations)	Feb 01
6. Provide technical assistance to improve production (with ANACAFE)	Mar/May 01
7. Assist producer group to meet bank credit requirements	Mar 01
8. Construct beneficios humedos (if it is determined that these facilities are needed)	May/Jul 01
9. Provide technical assistance with operation of beneficios humedeos and product marketing (with ANACAFE)	?
10. Institutionalize production technical assistance	Feb/May 02
11. Consolidate producer organization	Dec 02

c) Handicraft production and marketing

Activity	Timing
1. Meet with groups of producers to discuss possible assistance program.	Jan 01
2. Design production and marketing interventions for program.	Jan/Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
4. Provide technical assistance to diversify handicraft production based on assessment of market opportunities	Mar/Jun 01
5. Establish working relationship with existing producer organizations or develop alternative, informal producer groups.	Mar 01
6. Assist producer group to meet bank credit requirements	Mar 01
7. Provide technical assistance to improve production	Mar/May 01
8. Formalize marketing contacts	Jun – Aug 01
9. Assist producer groups with marketing	Oct 01 – Jan 02
10. Institutionalize production technical assistance	Feb – May 02
11. Consolidate producer organization	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Nebaj and the Ixil region.

A key to increased general economic activity is improvement of the road link between Nebaj and Sacapulus, as well as the planned paving of the road between Huehuetenango and San Cristobol, Alta Verapaz. This will greatly ease access to the Ixil region, and make transport of produce more reliable and of lower cost. Other complementary activities that would be supportive would be vocational education and literacy training for the adult population.

Finally, USAID has supported the creation of an internet access center managed by the Nebaj Chamber of Commerce. This Center offers the ability to all organizations in Nebaj to access a broad range of information services, including email.

E. Santa Cruz del Quiché

1. Development Context

a) Geographic characteristics

Santa Cruz del Quiché is located in the southern part of the Department of Quiché, and has a total area of 128 square kilometers. A paved road connects Santa Cruz to the south with Chichicastenango and then to the Inter-American Highway. Good dirt roads also lead east to Joyabaj and Pachalúm, connecting with Chimaltenango and San Juan Sacatepequez, west to San Antonio Ilotenango and on to Totonicapán, and north to Sacapulus, Nebaj, and Uspantán with connections to Huehuetenango and Cobán. Other feeder roads connect with other large municipalities within the Department. Within the Santa Cruz municipality, only 11 of the 52 communities cannot be accessed by road. Santa Cruz is very much a crossroads for goods and people moving around central Guatemala.

Santa Cruz is 2,021 meters above sea level, and the area around Santa Cruz is relatively flat except for deep canyons around principal rivers. Elevation varies between 650 meters above sea level and 2,400 meters. Temperatures tend to be cool, varying between 15 and 26 degrees Centigrade (59 and 79 degrees F). Santa Cruz municipality tends to be dry, with average annual rain fall varying between one to one and a quarter meters. The soils in Santa Cruz tend to be of low fertility, and they drain very quickly leaving behind limited moisture.

Sixty-one percent of homes in Quiché have electricity, the highest among the targeted municipalities. However, both the town of Santa Cruz and the smaller communities in the municipality suffer from undependable and inadequate water. Santa Cruz has nearly one hundred telephone lines; far more than the other targeted municipalities except for San Pedro Carchá.

b) Human Resources and Social/Cultural Context

The population of Santa Cruz del Quiché, according to the 1994 census, was 38,249. Thirty-eight percent of the population lives in the municipal capital, while the rest are classified as rural even though they may live in small towns. Approximately 88% of the population is indigenous (Mayan Indians). Half of the adult population of Santa Cruz is illiterate, and 56% of the adult population has never attended school. Only 8% received education beyond primary school. In terms of language, 40% learned Spanish as the native tongue, indicating a language shift to Spanish phenomenon.

There are at least four production groups organized in Quiché, with a total of about 300 members, however these organizations are fairly weak. One is an organization of Central Park merchants. A second group is the Comité Artesanal, which makes straw bottle coverings for rum bottles. A small third group has been functioning for only a year and seeks financing for small-scale corn and bean farmers. The fourth is the

Cooperative Rey Quiché, which at one time was a strong organization but lost most of its members due to the 1976 earthquake and the armed conflict.

Santa Cruz del Quiché was severely affected by the conflict. The church, rural organizations, and people affiliated with the Christian Democrat political party were particularly persecuted. At one point, the Catholic Diocese in Santa Cruz was forced to close because of the violence, with all staff withdrawn from the area.

c) Economic Conditions

Only 8% of the people in the municipality of Santa Cruz are small farmers, and only another 14% work as agricultural laborers (and some of these are seasonal migrants harvesting coffee or sugarcane). Thirty-eight percent of the workforce is classified as common laborers, and the leading economic sectors in Santa Cruz are commerce, light manufacturing, and artisanry. Those that do farm produce subsistence corn and beans on the poor, dry soils found within the municipality.

The EBF survey recorded the average monthly income in Santa Cruz during the month prior to the interview as Q1,549 (Q3,121 in urban areas and Q1,103 in rural areas). This was the second highest of the targeted municipalities surveyed, and the highest one, La Libertad, is in an area where cost of living is high and the monthly income figure probably overstates the relative acquisitive power.

Santa Cruz serves as a market place and service center for goods shipped to and from Guatemala City and other markets. Large trucks bring goods to Santa Cruz, where they are off loaded, stored, and then shipped to smaller villages on small trucks. Approximately 100 people are involved in manufacture of typical weavings, for sale within Guatemala, and an estimated 1,000 people are involved directly or indirectly in this business.

d) On-going Development Activities

There are over a dozen development organizations with offices in Santa Cruz, but none of these implement programs within the municipality itself. The emphasis of all of the development programs has been on rural municipalities in Quiché, not on the Departmental capital.

2. Development Opportunities and Challenges

Santa Cruz del Quiché has the best road access, electricity service, and telephone coverage of any of the targeted municipalities, and its relatively high-income level shows it to be a relatively well-functioning economy, compared with the others targeted. The fact that 85% of the communities in the municipality have road connections with the town of Santa Cruz is exceptionally good for the Zonapaz region. Santa Cruz is clearly a commercial center, exceeding the role of market town as envisioned in this program.

However, the poor soils in Santa Cruz and the severe shortage of water place significant constraints on development potential. Also, the fact that there are no other development organizations active in the municipality means that the AGIL program will not be able to build upon on-going activities, and it will be difficult to create entirely new production initiatives in the short-time period available to the program.

3. Investment Options Considered

- Horticulture production for export in San Antonio Ilotenango: Although the agricultural potential in Santa Cruz is extremely limited, there is very good potential in the neighboring municipality of San Antonio Ilotenango. A private marketing agent is working with groups of producers in San Antonio to produce blackberries and snow peas, and could possibly diversify to asparagus. The AGIL program is currently providing support to this activity, and may undertake a reorganization of the existing producer group to assist it in adopting a more appropriate structure.
- Apples: Chichicastenango is one of the centers of apple production in Guatemala, and improvements in cold storage and possibly construction of apple processing facilities (dried apples, apple juice or cider) are needed to expand market options. It is not clear if Santa Cruz has a role to play in this industry, however, as the more likely location for such an activity would either be in Chichicastenango itself, or nearer to the Inter-American highway.
- Woven straw bottle covers: Santa Cruz has become the preferred source of woven straw covers for rum produced in Guatemala, i.e. for Ron Zacapa Centenario. There is presently a small group of women (14) that produce these bottle casings, and they are able to produce all of the covers required. However, it may be possible to build on this experience by identifying other alternative markets. For example, tequila producers in Mexico might be an additional, and much larger, market. In addition, the straw covers are made from sheets of woven straw, which are very attractive, and there may be other alternative uses for this handicraft.
- Textiles: Santa Cruz produces very attractive native textiles for the domestic market, with a wide variety of products. Although the number of producers is presently limited (estimated at 100), certainly more could become involved if sufficient market is identified for their product. An analysis is needed to determine if products could be diversified to meet a wider market than that presently served.
- General commerce: As noted, Santa Cruz serves primarily as a commercial center for the Department of Quiché. Goods are transported in large trucks to Santa Cruz and off loaded and stored there for on-shipment via smaller vehicles. Produce from the region is also to some extent collected in Santa Cruz for shipment to markets in larger lots. The Mayor of Santa Cruz has requested assistance with construction of a new market, and USAID has supported creation of an internet service center managed by the Chamber of Commerce. AGIL could provide specialized technical

assistance to help Santa Cruz merchants to take advantage of new technology to improve their marketing efficiency.

4. Strategic choices

Given that there are few investment options in Santa Cruz, the AGIL strategy for this municipality may need to be seen as a special case. The fact that only 8% of the active labor force are farmers, and that their activity is limited to subsistence corn and bean production, creates a challenge for the AGIL program. The objective of the program is to increase rural family incomes, and the interventions available are to assist small farmers and micro entrepreneurs. Although viable farming activities can be supported in neighboring municipalities, it is unlikely that this will have a significant impact on rural family income in Santa Cruz. The one economic activity that appears to warrant specific attention is handicrafts, but the number of producers appears to be limited at present. However, if AGIL is able to identify expanded market options, it could involve a larger number of producers.

However, the primary focus of AGIL support will be on development of micro entrepreneurs, targeting assistance to the extent possible on rural micro entrepreneurs, or working with urban ones who have clear links to rural producers. Since the leading economic activity in the municipality is commerce, the program will build on this rather than undertaking investments targeted at a specific crop or other economic activity (except to continue on-going support to producers in San Antonio Ilotenango). The task will be to determine what systemic interventions can be undertaken to improve the efficiency of Santa Cruz as a commercial center, and to see that the benefits of this role extend to the rural areas surrounding the municipal capital. Such systemic interventions could include general support for micro-enterprise development, both through expansion of micro finance programs and creation of targeted technical assistance initiatives. Other types of possible investment may include support for the Municipality's effort to obtain financing for construction of a new market, and technical assistance in market management in order to improve efficiency and lower costs.

As noted above, Santa Cruz is one of the designated sites for USAID assistance in creating Internet access in rural areas, and AGIL technical assistance will be provided to assure that small and medium entrepreneurs learn how to use this resource to improve their operations, improving efficiency and hopefully expanding operations and employment.

5. Financial Service Providers

There are five commercial banks with agencies in Santa Cruz (BANRURAL, Grenai and Townsen, Banco Industrial, ConstruBanco, and Crédito Hipotecuaria), which is another key indication of the importance of the municipality as a commercial center. Of these, only BANRURAL offers credit to micro entrepreneurs that are target of the AGIL program. However, given the presence of such a wide range of banks, it may be possible to interest them in adopting some forms of micro finance lending procedures.

The BANRURAL agency will benefit from training and technical assistance offered to all agencies located in the Zonapaz, as well as from assistance given to the central office.

The largest private voluntary organizations providing credit services in Santa Cruz are the Santa Cruz credit and savings cooperative, with 900 members, and AYNLA, an NGO serving 1,000 clients. These organizations need assistance with control of delinquency, development of improved credit approval and management policies, and preparation of medium-term business plans. AGIL will promote and support provision of technical assistance by FENACOAC to the Santa Cruz cooperative, and possibly to AYNLA.

6. Implementation timeline

The following presents an initial schedule of interventions to be undertaken by the AGIL program in Santa Cruz del Quiché:

a) Production and diversification of export horticulture (San Antonio Ilotenango)

Activity	Timing
1. Design production and marketing interventions for program with active participation of potential producers.	Jan/Feb 01
2. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
3. Provide technical assistance to improve and diversify production	Mar/May 01
4. Assist producer group to meet bank credit requirements	Mar 01
5. Formalize marketing contacts and establish packing facility	Jun – Aug 01
6. Assist producer group with marketing	Oct 01 – Jan 02
7. Institutionalize production technical assistance	Feb – May 02
8. Consolidate producer organization	Dec 02

b) Handicraft production and marketing

Activity	Timing
1. Meet with groups of producers to discuss possible assistance program.	Mar 01
2. Design production and marketing interventions for program.	Mar 01
3. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
4. Provide technical assistance to diversify handicraft production based on assessment of market opportunities	Mar/Jun 01
5. Establish working relationship with existing producer organizations or develop alternative, informal producer groups.	Mar 01
6. Assist producer group to meet bank credit requirements	Mar 01
7. Provide technical assistance to improve production	Mar/May 01
8. Formalize marketing contacts	Jun – Aug 01
9. Assist producer groups with marketing	Oct 01 – Jan 02
10. Institutionalize production technical assistance	Feb – May 02
11. Consolidate producer organization	Dec 02

c) Commercial activity support

Activity	Timing
1. Review potential assistance plans with Chamber of Commerce	Mar 00
2. Meet with informal group of merchants to discuss possible AGIL assistance	Mar 01
3. Design production, processing and marketing interventions jointly with merchants	May 01
4. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
5. Provide technical assistance to improve marketing function	Mar/Dec 01
6. Assist merchants to meet bank credit requirements	Sep 01
7. Institutionalize marketing technical assistance	Feb/May 02
8. Consolidate merchant organization	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will be an important component in the development of broader economic activity in Santa Cruz del Quiché.

Finally, USAID has supported the creation of an internet access center managed by the Santa Cruz Chamber of Commerce. This Center offers the ability to all organizations in the municipality to access a broad range of information services, including email.

F. Chisec

1. Development context

a) Geographic characteristics

Chisec is located in the northern part of the Department of Alta Verapaz, with an area of 1,488 square kilometers (one of the largest municipalities in Guatemala). Chisec is 294 kilometers from Guatemala City, all of which are paved except the soon-to-be completed 78 kilometers. All-weather roads connect Chisec with neighboring municipalities of Ixcán, San Bartolomé de las Casas, and Cahabón. The road north out of Chisec also connects with Sayaché and Flores in the Petén. Villages within Chisec municipality tend to be located near these roads, although access to many of the villages is limited due to lack of farm-to-market roads, or inability to transit existing access roads during the rainy season.

The town of Chisec is 230 meters above sea level, and elevations within the municipality vary from a low of 146 meters to a high of 800 meters. The topography includes a number of limestone peaks (karsts) that are scattered throughout the municipality. The climate varies from hot and humid to semi-hot and humid, with temperatures varying between 27 and 37 degrees Centigrade (81 to 99 degrees F). It rains throughout the year, although it rains less in March to May, with total rain between 1.6 and 2.1 meters per year. Soils in the municipality are very fertile, but fragile. Once covering vegetation is removed, the soils erode easily. The principal rivers in the municipality are La Pasión and the Chixoy, plus a number of smaller ones, and flooding from rivers is frequently a problem.

Electricity is currently only available in the municipal capital and one other village, but a transmission line and distribution network will soon provide current to the entire Northern Transversal Strip zone, including Chisec. Treated drinking water is only available in the town of Chisec, and an additional well is now being dug as the supply no longer meets demand. There are currently only six telephone lines in Chisec.

b) Human Resources and the Social/Cultural Context

The Instituto Nacional de Estadísticas (INE) estimates the Chisec municipality population to be 90,322 inhabitants, 89.2% of whom live in rural areas (The Encuesta de Bienestar Familiar carried out by Universidad del Valle with USAID funding found that only 29% of the population is rural, but it is assumed that this difference is caused by use of a different definition of urban versus rural population). The 1994 census found 13,924 economically active people in the municipality (although this does not include women working at home or assisting their husbands on the farms). The Universidad del Valle survey found that 92 percent of the population is Mayan Indian. They speak four different languages, Q'eqchi', Pocomchi, Quiché, and Achí. According to the 1994 National Census, Spanish is the mother tongue of 14% of the population. Of the speakers of Mayan languages, Q'eqchi' speakers predominate (92% of the

Mayan language speakers). The Chisec area was settled in the early 1800s, and the variation in Indigenous languages reflects the origins of the settling families. Much of the population is monolingual in their Mayan language. The 1994 census found that 74% of the population is illiterate, while the Universidad del Valle survey found only 52% illiterate. Between half and two-thirds of the inhabitants have never attended school.

A study of Chisec carried out by AGEXPRONT found seven producer organizations in Chisec, mainly cooperatives, with a total of 619 members. These organizations produce coffee, cardamom, corn, and beans.

Chisec experienced the violence during the peak of the war (1980-1983). In 1982, the army secured the town center and set up a relocation and reeducation camp for Q'eqchi' people caught in the crossfire of the war. Chisec is an area known particularly for the large property holdings of senior Army officer retirees, so it was essential for the Army to regain control of the region during the war. In more recent history, the massacre of 11 returned and resettled refugees in the aldea of Xamán by Army regulars in October 1995 turned world attention again to the abuses during the conflict.

c) Economic conditions

The Encuesta de Bienestar Familiar found that 36% of the inhabitants of Chisec are farmers, and another 29% are farm workers (including those who migrate to assist with coffee and sugarcane harvests). The other major employment categories are salesperson (11%), technician/mechanic (9%), and common laborer (7%). The average age of farmers in Chisec is 40 years, which is in the middle of the municipalities surveyed.

Average recorded family income during the month before the EBF survey was Q1,114, with the rural figure being Q1,165. Chisec was the only municipality surveyed where rural income was higher than urban income. This may be attributable to the fact that Chisec is still a zone of immigration and land settlement, with new rural exploitations that offer increased income prospects. Twenty percent of the Chisec inhabitants reported that they had access to credit, which is the fourth highest rate found.

Ninety-three percent of the inhabitants of Chisec are directly or indirectly dependent on agriculture and livestock activities, with the leading crops being cardamom (in the regions with middle to higher elevations), small amounts of coffee in the higher regions, and corn, beans, achote, cocoa, and pineapple. Forestry is the second leading economic activity, but is of declining importance. There are a little over 4,000 head of cattle and an equivalent number of pigs, and an estimated 40,000 chickens.

Petroleum is produced in several wells in the northern part of the municipality, but the wells are highly mechanized and generate little work. Taxes from the wells are divided equally by all of the municipalities in Alta Verapaz, and yield little income for Chisec. Tourism is a source of some income, mainly due to the Candelaria caves.

d) On-going Development Activities

The following organizations carry out development activities in Chisec:

- TALITA KUMI and Proyecto Don Bosco: These organizations carry out projects to increase production, and improve health, education, and other social services. They are funded mainly by European donors, but also receive support from GOG programs such as FIS, FONAPAZ, and PRONADE.
- Cooperative Housing Federation (CHF): CHF has supported development activities, with a grant from USAID, in the Ixcan region since the early 1990s, and began expanding agroforestry activities into Chisec municipality in 1997.
- CARE: Provides technical assistance for water and health projects.
- BANRURAL: Finances productive activities for small and medium sized producers.
- Various smaller programs, primarily European funded, that provide technical assistance within the municipality: PROASE, ALA/SALUD, Proyecto “Agua Fuente de Paz,” and Programa Las Verapaces.
- Fondo de Tierras: This program provides financing for land purchase and technical assistance and training to 54 families, plus several other possible projects under study.
- The Consejo Departamental de Desarrollo Urbano y Rural de Alto Verapaz is promoting the creation of the Centro de Promoción de Inversiones de Las Verapaces (PROVERAPACES).

2. Development Opportunities and Challenges

The development opportunities in Chisec derive from the fact that productive resources, both land and labor, are presently underutilized. There is abundant water and good soils if the covering vegetation is properly managed. Introduction of improved production and marketing technology for existing crops, plus introduction of new commercial agricultural activities to the region, could have a dramatic impact on incomes. The paving of the road to Coban, which will be completed shortly, will greatly improve market access, and the eventual paving of the road further to the north into Peten, and eventually across the northern transversal strip, will make Chisec a major crossroads. Finally, there are a number of development programs on-going in Chisec, and the AGIL program can build upon these efforts in collaboration with the other organizations.

The challenges, however, are also difficult. Unlike other regions, no entrepreneur has blazed a trail for new economic activities in Chisec, so productive activities are basically limited to the initiatives of individual, small-scale producers. The low literacy rates and significant percentage of the population that do not speak Spanish makes communication difficult. Access to electricity, potable water, and telephones is very weak. A significant portion of the productive land is susceptible to flooding. Much of the land lacks a legal title, which inhibits development of a land market and rural financing. Armed assaults from bandits on vehicles on the highways occur often enough to be a concern. There are few local technical assistance resources in the zone to help

producers become more productive. Finally, the population is spread out in a large number of small villages, so that concentration of labor for a major investment would require people to relocate.

3. Investment Options Considered

There are several existing and potential economic activities that could be supported through the AGIL program. The following presents a brief description of the potential activities identified to date:

- Cardamom production and marketing: Within the municipality of Chisec, over 7,000 hectares are dedicated to production of cardamom, producing 134,152 cwts of dried cardamom per year. However, no facilities exist in Chisec to process the cardamom, i.e. removing the fruit covering from the cardamom seed, and the product loses value and transportation costs are raised due to the lack of processing capacity. Production yields can also be increased using improved technology. It may also be possible to increase the price paid to the producer by exporting organic cardamom as in Barillas.
- Pineapple production and industrialization: The Chisec region is very appropriate for pineapple production, and it is presently grown in small quantities on family plots. If planted on a larger scale, it could be processed either as fresh, canned, or juice.
- Agro-forestry: Valuable research has been carried out by the Cooperative Housing Federation (CHF) in Ixcán and Chisec on various combinations of agricultural and forestry activities that offer potential for improved incomes as well as preservation of the fragile soils that characterize the region. Crops used in these agro-forestry trials that could have considerable potential are black pepper and allspice. Further dissemination of these technologies within Chisec would have a positive impact on incomes in the area.
- Persian limes: Persian limes are an appropriate crop for the conditions of Chisec, and once the road is paved access to markets will be easy. No information is available concerning present production of this crop in the region, however. USAID would need to obtain special permission to support Persian lime production if it is intended as an export activity.
- Cattle: Livestock is a major activity in the Peten to the north of Chisec, and there is a significant cattle herd in Chisec already. One option would be to establish feedlots to fatten cattle from the rangelands prior to shipment to market.
- Tilapia: Conditions are appropriate for fish farming in Chisec. Once the road is paved, the fish could be delivered to Cobán and other markets in a timely manner using simple transportation.

- Ecotourism: With the paving of the road to Coban, Chisec will be much more accessible to tourists. The natural beauty of the karst landscape itself can draw tourists, and the Candelaria caves are reportedly spectacular. Considerable investment in tourist amenities (hotels, restaurants) would be required, although some income could be gained from day tourists traveling in from Coban.

4. Strategic choices

As noted in the overview at the beginning of this document, a non-governmental organization, FUDEMI (the Fundación para el Desarrollo y Educación de la Mujer Indígena, via its program known as Talita Kumi), provides services in Chisec that pursue the same goals as the AGIL program. AGIL has awarded a grant to Talita Kumi to take a lead role in program implementation in this municipality. In addition, CHF is implementing agro-forestry extension activities in the municipality, with USAID funding, and AGIL will monitor these activities and report their impact on program objectives. Also, AGIL will regularly monitor Talita Kumi and CHF activities and provide supplementary specialized technical assistance when these institutions agree that this assistance is important in pursuit of program objectives. Finally, the AGIL staff will concentrate its efforts on assuring access to financial services in the municipality.

The selection of economic activities to be supported in Chisec is not easy. The most attractive one is cardamom, although this is limited to the mid- to higher-regions of the municipality. An intensive look at types of productive and marketing interventions to be undertaken is required, including an analysis of the geographic spread of production and the appropriate location of any processing facilities. Also, the program needs to assess the producer interest in forming some type of producer organization, and identifying the appropriate ownership structure for the processing facilities. AGIL may encourage Talita Kumi to seek assistance from the ASOBAGRI association in Barillas with this assessment.

Most of the other economic activities tend to involve either introducing totally new, untried crops, or building from a very small base. In the absence of an entrepreneur willing to give leadership to this process, it is difficult to justify such an investment by AGIL in the short time available to the program. For this reason, it is likely that the “multiple economic activity model” discussed in section two is the most appropriate one to be followed. AGIL’s grant to Talita Kumi can strengthen its capacity, through its training programs, to provide specific technical assistance support to facilitate a broad range of potential economic activities, and see which ones yield the greatest impact. By assisting to introduce new production and marketing ideas for agro-forestry, Persian lime, pineapple, cattle operations, etc., the program can reach a sufficient number of interventions so as to have a broad impact on incomes in the municipality. These efforts will be further supported by efforts to get BANRURAL and other commercial banks, plus micro finance organizations, to increase the availability of credit in the municipality.

The geographic focus of AGIL activities will be limited to the Chisec municipality. Given the size of this municipality, there is little justification for working in other areas.

5. Financial service providers

Presently, Talita Kumi and BANRURAL are the two financial service providers active in Chisec. Talita Kumi primary role in the municipality is to provide production technical assistance and training, but it manages a complementary micro finance program in order to help producers to take advantage of the production technical assistance. AGIL will provide assistance to Talita Kumi to review of its credit activity in order to assure its long-term sustainability. The BANRURAL staff in Chisec will benefit from specific agency training programs, designed to improve operational efficiency and to promote use of new financial products and procedures.

AGIL is also examining the possibility of supporting the creation of a branch office of one of FENACOAC's affiliated savings and credit cooperatives, located in Coban. This could be a significant step in increasing availability of financial services in the municipality. Once the paved road has been completed, facilitating access to Chisec, it may be possible to attract other financial intermediaries to the zone.

6. Implementation timeline

Detailed implementation plans will be developed with producers in Uspantan, but the following presents an initial plan of activities to be carried out to develop the selected economic activities, and a timeline for their implementation:

a) Cardamom production, processing and marketing

Activity	Timing
1. Grant awarded to Talita Kumi	Feb 01
2. Talita Kumi undertakes development program	Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
4. Create informal producer group among cardamom producers	Jun 01
5. Visit Chisec to monitor program implementation	Mar, Jun, Sep, Dec 01
6. Assist producer group to meet bank credit requirements	Jul 01
7. Institutionalize production technical assistance	Feb/May 02
8. Consolidate producer organization	Dec 02

b) Provision of targeted support to agro-forestry activities

Activity	Timing
1. Review CHF agro-forestry activities in Chisec.	Mar 01
2. Determine if complimentary specialized technical assistance is needed	Mar 01
3. Monitor program implementation and contribution to strategic objective	Jun, Sep, Dec 01 Mar, Jun, Sep, Dec, 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Chisec.

General economic activity will also increase once the road connecting Chisec with Coban has been paved. In addition, future paving of the road across the northern transversal strip, as well as up to the Peten, will make Chisec an important crossroad. Construction or improvement of farm to market roads within Chisec municipality is also important. Other complementary activities that would be supportive would be vocational education and literacy training for the adult population.

G. San Pedro Carchá

1. Development context

a) Geographic characteristics

San Pedro Carchá is located in the Department of Alta Verapaz in north-central Guatemala, with an area of 1,082 square kilometers. Good all-weather, paved roads connect San Pedro with Guatemala City (219 kilometers away) and the major Guatemalan ports. San Pedro is directly east of and only a short distance away from the Departmental capital of Cobán. From Carchá, roads extend north to Sebol and the Northern Transversal highway, and to the east to the municipality of Cahabón. Roads to neighboring municipalities are normally all-weather.

San Pedro is 1,282 meters above sea level, and within the municipality elevations vary from 350 to 2,200 meters. Average temperatures vary by elevation from hot to cool, with average of 19.6°C (67°F). Soils in Carchá are shallow with limestone karst origins, similar to those in Chisec, but have high fertility values. Soils close to the municipal capital tend to be deeper and of volcanic origin. Rains throughout the municipality tend to be abundant and spread throughout the year, with less pronounced rainy/dry seasons than in other regions of Guatemala. The principal river system in the municipality is the Rio Cahabón.

Buses travel between Coban and Carchá every fifteen minutes. However, other municipal services tend to be very poor. The “Desglose de la Encuesta de Bienestar Familiar” carried out by the Universidad del Valle indicated that only 29% of municipal inhabitants have access to electricity, and only 23% have water piped into their homes (39% depend on rain water). However, a monograph on the municipality prepared by AGEXPRONT indicates that 88% of the houses in the municipal capital and 36% of rural homes have electricity, and 43% of rural homes have water. There are more than 1,500 telephone lines in the municipality, extremely high in comparison to the other targeted regions.

b) Human Resources and the Social/Cultural Context

Total population in the municipality, according to the Instituto Nacional de Estadística, is projected to be 159,574 persons (81,955 men and 77,619 women). According to the 1994 census, the economically active population totaled 28,435, of which 2,198 were women. Seventy percent of the population is rural. Sixty-nine percent of the population is classified as illiterate, and 63% have never attended school (the Universidad del Valle survey found only 49% of the population to be illiterate). INE census figures show 93 percent indigenous, and less than five percent speakers of Spanish (speakers being overwhelmingly Q'eqchi').

There are 12 producer cooperatives in San Pedro Carchá municipality affiliated to FEDECOVERA, a federation of cooperatives in Alta and Baja Verapáz. These cooperatives reportedly have 1,739 members.

The communities of San Pedro Carchá did not experience the level of violence its less fortunate neighbors in the Polochic Valley to the south/southeast did, or for that matter, communities of Quiché department to the west. During the height of the violence in Guatemala, Army regulars and civil patrol units tended to abduct and/or assassinate individuals, rather than perpetrating village massacres. Still, many Q'eqchi' of Carchá fled the impending violence, joining the thousands of economic migrants from the region in the movement to Izabal, Peten and Belize.

c) Economic conditions

The Encuesta de Bienestar Familiar carried out by the Universidad del Valle with USAID funding in 1999 found that 21% of Carchá's working population were small farmers, with another 38% classified as agricultural workers. The other two principal employment categories were office workers and technicians/mechanics. The average age of small farmers was 40 years, and for agricultural workers it was 25.

Average recorded family income in the month prior to the survey was Q1,449 (Q2,803 urban and Q868 rural), which is among the highest of the targeted municipalities.

Agriculture is the principal economic activity in the municipality, with 18,175 hectares producing cardamom and 12,587 producing coffee. The other major crops are basic grains. Lumber extraction is also a leading economic activity, and cattle, pigs and chickens are raised on small farms. Finally, ecotourism has potential in the municipality, with a series of caves, natural swimming pools, and mountain paths.

d) On-going Development Activities

The GTZ Programa Las Verapaces has been the principal external donor assistance activity in Alta and Baja Verapaz. Non-governmental organizations active in San Pedro Carchá include CARE, Talita Kumi, Centro Don Bosco, Plan Internacional, ACT, ACOPADIQ, FUNCEDESCRI, and Asociación Mujeres Vamos Adelante. Also, as noted earlier, twelve of FEDECOVERA's member cooperatives are located in the municipality. For the purposes pursued by the AGIL program, the most important development institutions are Talita Kumi and FEDECOVERA.

2. Development Opportunities and Challenges

San Pedro Carchá has both the natural resource and institutional base for more accelerated economic growth. Due to its diverse topography, the municipality has the climatic and soil conditions required to produce both very high quality coffee and very high quality cardamom. However, due to the stresses caused by the oversupply situation in the markets for both of these commodities, intensive effort is needed to

assure that both production and post-harvest handling of these products allow producers to receive maximum returns on their investments. Two organizations can provide leadership in supporting improved production and marketing in San Pedro Carchá, Talita Kumi and FEDECOVERA. The first of these has already received a grant from AGIL to support expanded activities within the municipality, and the second is receiving assistance through a USAID program with ANACAFE. One of the primary limitations for further development of the coffee and cardamom industries is the lack of key rural infrastructure, particularly beneficios humedos for coffee, and drying facilities for cardamom.

Carchá is relatively better off than the other target regions in terms of rates of literacy and percent of the population who are Spanish speakers. However, continued investment in literacy campaigns would be important.

3. Investment Options Considered

Several potential development activities have been identified for possible AGIL investments in San Pedro Carchá. The following provides a summary listing:

- Coffee production and processing: Carchá produces very high quality coffee, but presently only coffee from larger farms receives a premium based on product quality. Typically, smaller producers lack the infrastructure necessary to assure appropriate post-harvest handling of the coffee beans. Productivity of the small farmer coffee fields can also be improved, and it may be possible to obtain premiums for organic coffee production by very small farmers, if the appropriate marketing contacts are established.
- Cardamom production and processing: Cardamom production, as with coffee, requires appropriate post-harvest handling in order to assure that producers receive the maximum possible price. As with coffee, cardamom seeds must be separated from the surrounding fruit as soon as possible and dried. With the low prices presently paid on the world market, it is essential that cardamom producers in San Pedro Carchá use the best post-harvest handling techniques in order to obtain the highest possible prices.
- Chile Coban drying and processing: Chile Coban is a specialized chile pepper that has a wide market within Guatemala once it has been dried and ground into a powder. The unique flavor of this chile powder could have a large demand in the export market.
- Ecotourism: San Pedro Carchá has multiple sites that could attract ecotourists, if developed with appropriate hotel and restaurant facilities, and promoted to the potential clients.
- Forest products: High value lumber is presently extracted from the municipality, but the local production of furniture and other wood products is underdeveloped.

- Research into heart of palm and tomate de arbol: Soil and climatic conditions favor production of these two crops, but further research is needed to determine the feasibility of large-scale plantings.

4. Strategic choices

There are two organizations that play a leadership role in development of the San Pedro Carchá region, Talita Kumi and FEDECOVERA. The first of these organizations has its main offices in the municipality, and the second has a number of affiliated cooperatives. Rather than initiate independent activities, the AGIL program will instead work through these two organizations. Talita Kumi has already received a grant under the AGIL program to provide assistance to small-scale coffee and cardamom producers. FEDECOVERA is also receiving financial and technical support from USAID through USAID's cooperative agreement with ANACAFE.

Of the economic activities reviewed, clearly coffee and cardamom offer the greatest potential. These two crops presently occupy the majority of the productive land in Carchá, and any improvement in the incomes of these producers will rapidly impact on overall economic development in the municipality. There are also clear interventions that can be undertaken to improve the productivity and post-harvest handling of these products.

Of the other potential activities, ecotourism perhaps offers the greatest immediate potential, but little information is presently available concerning the interest of local investors in taking advantage of this opportunity. Production of tomate de arbol may also represent an opportunity, but neither of the two organizations that will take a lead in the Carchá area have proposed providing assistance with this crop. It may be that AGEXPRONT will provide leadership in efforts to develop both ecotourism and tomate de arbol production and marketing.

Finally, the Asociación Mujeres Vamos Adelante should be further analyzed to see if it could contribute to the program's gender objectives.

5. Financial Service Providers

BANRURAL has an agency in San Pedro that will benefit from the training and technical assistance that will be given to all BANRURAL staff in the targeted municipalities, as well as the support that will be provided to the Bank's central office. In addition, BANCAFE has selected Carchá as one of the three locations where it intends to expand its micro lending program in 2001. Third, FENACOAC has indicated that its successful affiliated cooperative in Coban is interested in opening a branch office in Carchá, and the AGIL program may provide limited grant support to facilitate this initiative. Finally, Talita Kumi is presently working with communal banks, and will expand this effort under the existing AGIL grant. It is important that Talita Kumi be included in general AGIL

program training of micro finance organizations, and that a long-term sustainability analysis and business plan be developed for its micro finance program.

6. Implementation timeline

The following presents an initial timeline for the proposed activities:

a) Cardamom production, processing and marketing

Activity	Timing
1. Grant awarded to Talita Kumi	Feb 01
2. Talita Kumi undertakes development program	Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
4. Create informal producer group among cardamom producers	Jun 01
5. Visit Carchá to monitor program implementation	Mar, Jun, Sep, Dec 01
6. Assist producer group to meet bank credit requirements	Jul 01
7. Institutionalize production technical assistance	Feb/May 02
8. Consolidate producer organization	Dec 02

b) Coffee production, processing and marketing

Activity	Timing
1. Review potential assistance plans with ANACAFE	Dec 00
2. Meet with FEDECOVERA to discuss possible AGIL assistance	Jan 01
3. Design production, processing and marketing interventions jointly with FEDECOVERA and ANACAFE	Feb 01
4. Assess credit needs and technical assistance needs of proposed interventions	Feb 01
5. Determine support required by producer organizations located in municipality	Feb 01
6. Provide technical assistance to improve production (with ANACAFE)	Mar/May 01
7. Assist producer group to meet bank credit requirements	Mar 01
8. Construct beneficios humedos (where needed)	May/Jul 01
9. Provide technical assistance with operation of beneficios humedeos and product marketing (with FEDECOVERA and ANACAFE)	?
10. Institutionalize production technical assistance	Feb/May 02
11. Consolidate producer organizations	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Carchá. Construction or improvement of farm to market roads within the San Pedro municipality is also important. Other complementary activities that would be supportive would be vocational education and literacy training for the adult population.

H. La Libertad

1. Development Context

a) Geographic Characteristics

La Libertad is located in the western part of the Department of Peten, with a total area of 7,047 square kilometers (one of the largest municipalities in Guatemala). A newly paved road connects La Libertad to the Departmental capital, Flores, and there is a newly paved road from Flores to the Transatlantic Highway. This provides rapid and dependable transportation to Guatemala City and to the major Caribbean port of Santo Tomas del Castillo. Other newly paved roads run from La Libertad almost to the Mexican border to the west, and to Sayaché in the south. South of Sayaché there is an all-weather dirt road connection to Chisec in Alta Verapaz, from which a paved road connects to Coban and the Atlantic highway. There are plans to pave this route also. The improvement of the road links connecting La Libertad to markets is a fundamental change in the development context for this isolated municipality.

La Libertad is classified as very humid, hot sub-tropical forest. There is an enormous biodiversity within the municipality, including jaguars, pumas, ocelote, spider monkeys, tapirs, deer, armadillo, and many smaller animals, plus a wide range of insects and flora.. Most of the municipality consists of flat plains, but in the northern region the Sierra Lacandona mountains break up the topography. The municipal capital is 190 meters above sea level. The average temperature in La Libertad is 26.3°C (79°F), and rains are abundant ranging from 1.2 to 2.1 meters annually.

There are several large, navigable rivers in the municipality, including La Pasión and the Usumacinta, which forms the border between Guatemala and Mexico on the western side of the municipality. Only a few experimental irrigation systems presently exist, but there is considerable potential for irrigation in the vicinity of the major rivers. The Sierra del Lancandon forest reserve in the municipality protects 9,000 hectares of virgin forests. There are also 35 known archeological sites in La Libertad.

The Encuesta de Bienestar Familiar, carried out by the Universidad del Valle with USAID funding, found that 51% of the homes in La Libertad have electricity, and 50% have water. Another 40% of the houses have access to well water. There are only four phones in La Libertad.

b) Human Resources and the Social/Cultural Context

The population in 2000 in La Libertad is estimated to be 79,416, nearly double what it was six years earlier. Between 1987 and 1996 over 1800 returned refugees were settled in La Libertad. Reports on the composition of the population vary, with the Encuesta de Bienestar Familiar indicating that 30% of the population is urban and 89% indigenous, while a survey carried out the same year by IDIES indicates that only 10% of the population is urban, and 17% indigenous. Eighty-nine percent of the population

speaks Spanish as the native tongue. Of the native speakers of indigenous languages, 75% are speakers of Q'eqchi'. Between 30 and 40% of the population is illiterate.

There are 18 cooperatives registered in the municipality, many of which were created among groups of settlers along the major rivers. Officially these cooperatives have 663 members, although the actual number is probably below that figure.

La Libertad was severely affected by the civil conflict, particularly during the 1980s. There was considerable out migration by refugees, and extensive armed activity by both the guerrilla movement and the armed forces. This disrupted economic activities and led to temporary abandonment of a number of agricultural colonization sites. Since signature of the Peace Accords, groups have returned to claim their former land holdings, but in some cases other groups have taken over the properties, leading to complex land ownership conflicts. CARE has implemented an extensive land-titling project in the municipality, and FONTIERRAS is actively working to resolve remaining conflicts.

c) Economic Conditions

Thirty-one percent of the working population of La Libertad are farmers, and another 35 percent are agricultural workers, showing that agriculture dominates the economic life of the municipality. The average age of farmers is 36, and of farm workers 22, which is among the lowest of the target municipalities. This is indicative of the frontier settlement culture of the region. The Encuesta de Bienestar Familiar found that the average family income during the month prior to the survey was Q1,852, which is the highest of all the target municipalities (urban income averaged Q3,647 and rural Q1,082). Only 10% of the population indicated that they had access to credit.

Until recently the primary economic activities in La Libertad were timber cutting, extraction of chicle resin, and cattle. With the settlement of farming groups, production of basic grains was added to this economic base, and small livestock (primarily pigs) grew in importance. More diversified crops have now emerged, primarily sesame and peanut production. More recently, production of non-traditional crops (chiles habeneros and jalapeños and pepitoria seeds) for export to Mexico has been attempted, but the lack of a formal border crossing remains an impediment to expansion of these crops. There are also dairy herds in the municipality, which could be expanded if the Petenlak milk cooperative becomes operational.

Ecotourism offers considerable, undeveloped potential for the municipality, given the extensive protected areas and archeological sites. In addition, there are several oil wells within the area.

d) On-going Development Activities

Several international development activities have been or are being implemented in La Libertad. The European Union is supporting municipal development projects in the

municipal capital and in some of the smaller villages, and is supporting sustainable agricultural activities in the buffer zone to the Mayan Biosphere. Spain is also assisting municipal development. CATIE is providing technical assistance in sustainable forest management, and is working with farm communities in the region to promote sustainable agricultural practices. Finally, Taiwan is providing assistance with crop diversification in the area.

USAID has supported development of sustainable agro-forestry practices through a grant to the Centro Maya (which now also has a grant from AGIL), and USAID has also supported land titling and development activities by CARE in the zone.

2. Development Opportunities and Challenges

There are a number of factors that favor the development of La Libertad that could lead to improved incomes for the inhabitants. The population tends to be young and open to new opportunities. Literacy rates are relatively high, and there are few inhabitants that are unable to communicate in Spanish. Recent investment in improved roads and the free trade agreement with Mexico have greatly improved economic prospects in the municipality. La Libertad has valuable, undeveloped natural resources, and with sustainable management these resources will be the basis for future growth. Sustainable forest management and ecotourism are two essential ingredients in this growth. Although the soils in La Libertad are fragile, with appropriate management and use of irrigation, high value export crops can generate significant increases in incomes. There is also considerable potential for irrigated agriculture along the major river systems. Finally, the recent investment in land titling creates greater investment security for farmers.

Constraints to development in the region are primarily related to markets. They include the lack of a formal border crossing between La Libertad and Mexico, and the fact that the Petenlac milk cooperative, located in central Peten, is not operational. Although the quality of roads in the region has been substantially improved recently, this has not resulted in a significant reduction in transportation costs, indicating possible collusion in price setting among transporters. Finally, the virtual absence of telephone lines limits economic development.

Access to financial services in the municipality is also limited, as is the availability of investment capital. BANRURAL has a branch office in La Libertad, and Genesis Empresarial has recently begun to provide services from its office in Sayaché.

3. Investment Options Considered

- Sesame production and marketing: Sesame seed production and marketing offer considerable income advantages over basic grain production. While the market for sesame varies considerably during the year, if farmers are able to withhold their product from the market for at least two or three months, they are able to obtain very favorable prices. Presently, the Centro Maya is supporting an expansion of sesame

production among over 500 families. The primary constraint at this point is the lack of credit to finance the harvest and to allow producers to await higher off-season sesame prices. Sesame seeds are shipped to world markets via experienced firms in Retalhuleu in southern Guatemala.

- Peanut production and marketing: Peanuts are a viable production crop for La Libertad, offering improved incomes over basic grain production. La Libertad appears to be competitive with peanut imports into Guatemala from Nicaragua and Mexico. Two varieties of peanuts are produced in La Libertad, one with large nuts and the other small. Each has its own market.
- Export horticulture: Production of high value jalapeño and habanero chile peppers and pepitoria seeds for the Mexican market offers much higher incomes per unit of land, particularly in areas with potential for irrigation. If the Peten is formally declared free of the Mediterranean fruit fly (Moscamed), further expansion of these exports into other markets will be possible.
- Ecotourism: The Sierra del Lacandon reserve offers considerable potential for ecotourism activities, as do the multiple Mayan archeological sites found in the Municipality. In addition, the major rivers offer rafting experiences.
- Sustainable forest management: The Centro Maya has shown that sustainable forest management and lumber extraction offer substantially increased incomes over existing practices.
- Dairy cattle: The extensive land holdings in La Libertad are appropriate for dairy cattle if the Petenlac cooperative becomes operational and offers a viable market for milk production.

4. Strategic Choices

The leading organization supporting development activities related to AGIL program objectives in La Libertad is the Centro Maya, a non-governmental organization organized in the early 1990s with support from USAID, CATIE, the Rodale Institute of the United States, and the Guatemalan Ministry of Agriculture and Livestock. The Centro Maya has an ongoing grant from USAID for sustainable forest management activities, and has now received a complementary grant from AGIL primarily to support expansion of sesame and peanut production, as well as other products (including sustainable forest products). Rapid expansion of peanut and sesame production appears to offer the greatest potential for increased incomes in the municipality.

In collaboration with Centro Maya, and possibly AGEXPRONT, AGIL may also support expansion of ecotourism activities in the municipality, in coordination with the municipal government's Unidad Técnico Administrativo. Finally, depending on the results of an ongoing AGEXPRONT review of the Petenlac milk cooperative, AGIL could support efforts to improve dairy operations in the municipality.

The geographic focus of activities will focus solely on La Libertad municipality, although there may be some collateral impact on neighboring communities. Within La Libertad, efforts will probably concentrate on the Las Cruces area, and on support for newly titled land owners along the La Libertad to Naranjo highway.

5. Financial Service Providers

As noted above, the primary credit institution serving La Libertad is BANRURAL. Within the municipality, BANRURAL has a very favorable reputation for being responsive to the needs of producers. However, the range of financing available from the Bank appears limited, as producers are unable to obtain financing for harvest costs, and for storage of the harvest for several months until prices rise. The staff of the BANRURAL agency will be included in training courses and have access to technical assistance available to all agencies located in the target municipalities. In addition, Genesis Empresarial is establishing an office in Sayaché, with support from a separate USAID grant, and will offer micro enterprise financing within La Libertad municipality.

6. Implementation Timeline

As noted above, the Centro Maya will be the primary implementation vehicle for AGIL for activities in La Libertad, via a grant agreement. The following presents an abbreviated schedule for implementation of AGIL supported activities:

a) Sesame and peanut production, processing and marketing

Activity	Timing
1. Grant awarded to Centro Maya	Feb 01
2. Centro Maya undertakes development program	Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
4. Strengthen informal producer group among sesame and peanut producers	Jun 01
5. Visit La Libertad to monitor program implementation	Mar, Jun, Sep, Dec 01; Mar, Jun, Sep, Dec 02
6. Assist producer group to meet bank credit requirements	Jul 01
7. Institutionalize production technical assistance	Feb/May 02
8. Consolidate producer organization	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in La Libertad. In fact, the Centro Maya is a prime candidate for provision of services under this program.

I. Ixcán

1. Development Context

a) Geographic Characteristics

The municipality of Ixcán, with 1582 square kilometers, is located in the northern part of the Department of Quiché, bordering with Mexico to the north. The municipality has an all-weather road connection across the northern transversal strip to Fray Bartolomé and on to a junction with the paved road going from Flores to the Atlantic highway. A few years ago, the Government of Guatemala constructed an improved, all-weather road between Ixcán and the road between Cobán and Chisec, greatly reducing transit time for vehicles traveling to Cobán and on to markets. Recently, the road to the west has been upgraded and a bridge constructed facilitating commerce with Barillas and on into Huehuetenango. Considerable investment has been made in constructing access roads within the municipality, and approximately 200 kilometers of access roads now exist, and a non-governmental organization has been created to provide road maintenance services. These investments in transportation infrastructure fundamentally improve the development potential of the Ixcán.

The climate in Ixcán is classified as very humid, hot, subtropical forest. Rainfall in the zone is abundant, varying from 2.0 to 4.0 meters, and average temperatures range from 24 to 30°C (75-86°F). The municipal capital is 160 meters above sea level. Soils in the municipality tend to be shallow and fragile, with relatively low fertility. However, there are approximately 35 square kilometers of alluvial soils, subject to frequent flooding but with high fertility. There are a number of major rivers in the area, including the Río Chixoy, Río Ixcán, and Río Zalbal, all of which flow north and join into the Río Usumacinta, which empties into the Gulf of Mexico. There are no irrigation systems in the Ixcán.

Only 30% of the houses in the Ixcán have access to electricity, and 84% of the houses depend on wells for water. There are less than 40 telephones in the municipality.

b) Human Resources and the Social/Cultural Context

The Ixcán is a new municipality, formally established in 1985. It was initially colonized beginning in 1964, before which there were no permanent residents in the zone. The population of the Ixcán in 2000 is estimated at 62,571, 85 to 93% of which lives in rural areas. Over 90% of the population is indigenous, representing most of the major linguistic groups in Guatemala as the colonizing population came from throughout the Indian highlands region. However, the dominant indigenous language is Q'eqchi.

The Encuesta de Bienestar Familiar indicates that approximately 38% of the population is illiterate, which is one of the lowest percentages of the targeted municipalities. However, according to CONALFA, in 1998 69% of the population was illiterate. The

Instituto Nacional de Estadísticas indicates that 55% of the CY2000 population never attended school, and only 2% have attended beyond primary school.

There are nine production cooperatives that have received legal recognition, which reportedly have a total membership of just under 1900 farmers. A new farmer organizations has recently been promoted by the Cooperative Housing Foundation, under a grant with USAID.

The Ixcan region was very seriously affected during the years of armed conflict. Much of the population of the communities established in the 1960s and 1970s fled to Mexico to avoid persecution by either the army or the guerillas, and when the former owners returned they often found their land inhabited by others. There are reports in the region of entire villages being massacred. These issues are still prevalent in the zone, and at least initially it was difficult the get individuals from communities with differing political backgrounds to work together.

c) Economic Conditions

Fifty percent of the working population of Ixcan are farmers, and another 25% are farm workers. These are the highest percentages found in the targeted municipalities. The average age of the farmers is 36, and for farm workers it is 28. The Encuesta de Bienestar Familiar found that in the month prior to the survey average incomes were Q1,471 (Q4,555 urban and Q960 rural). The average income was third highest among the targeted municipalities. The urban income was by far the highest in the sample, and may reflect the fact that a high percentage of the urban population either works for the central government or for international development organizations. This fact also probably distorts the combined urban/rural income average.

Two-thirds of the agricultural land in the municipality is used for basic grain production, with most of the rest used for coffee and cardamom. Cardamom is the best source of incomes in the area, and there are a several cardamom drying facilities in the producer cooperatives. Livestock production is limited with no large herds. Other crops produced in the zone are heart of palm, vanilla, achiote, and rubber. In the past, timber operations have been a major source of employment and incomes, but this resource has reportedly been seriously depleted.

d) On-going Development Activities

The principal organization pursuing AGIL program objectives in Ixcan is the Cooperative Housing Foundation (CHF), supported by a USAID cooperative agreement. CHF works on a wide range of activities, from road construction and maintenance, to community development, to agro-forestry research and extension, to non-traditional export promotion. Other development organizations active in the municipality include ADEL, CESIDE, DECOPAZ, FARCOTA, Pastoral Social, UICN, BANRURAL, and INAB. However, CHF is unquestionably the most active organization in the region (in relation to AGIL objectives).

2. Development Opportunities and Challenges

The Ixcán has grown and progressed much faster than many would have anticipated a few years ago. Technological packages have been developed that offer substantial income generation possibilities to the local population, and CHF has established a broad network of demonstration plots that can disseminate this information to a wide range of producers. The road links to Cobán and to Barillas have been significantly improved, and the Ixcán is no longer totally isolated for long periods by heavy rains. There is also a plan to pave the entire transversal norte highway, which would greatly improve access to markets. In addition to improvements in the physical environment, the various communities that were on different sides of the civil conflict have now gained experience in working together toward common goals, creating new opportunities for community organization and development.

Despite recent improvements, the chief challenge in the Ixcán is still its isolation from markets and information, as the exceedingly heavy rain fall during certain times of the year continues to cut off roads to outlying villages. Financial services in Ixcán are also undeveloped, and this represents a critical area for AGIL assistance. Finally, only recently has CHF initiated the creation of a regional farmer organization (CORDISA) that could serve as a successor organization after CHF completes its tasks. Considerable effort is needed to consolidate this organization so that there will be a continuing source of leadership for the development of the municipality.

3. Investment Options Considered

- Cardamom: As noted above, cardamom offers an attractive investment option for the Ixcán region. The fact that there are already a number of cardamom drying locations in the cooperatives in the region indicates that the basic infrastructure is in place to take advantage of the potential for this crop. The ASOBAGRI association in Barillas has established export channels for organic cardamom, and the new road link between the Ixcán and Barillas would facilitate collaboration in the marketing of this crop.
- Agroforestry: CHF has developed a number of viable technological packages for sustainable production in the Ixcán. These packages integrate higher yielding crops such as vanilla and black pepper with crops that can maintain soil fertility and structure.
- Persian limes: This crop is appropriate for the ecology of the Ixcán, and has a ready market. If targeted for export, assistance under AGIL with this crop would require a waiver of USAID restrictions on assistance to citrus exports, but the level of lime production in the US has dropped so much that it would not be difficult to justify the required waiver.

- Pineapples: Pineapples are presently produced in the Ixcán for local consumption. This is also a crop that is well suited to the conditions of the zone, if an appropriate marketing infrastructure is developed.
- Heart of palm: CHF has provided intensive assistance to the development of this product, including establishing processing and bottling capacity in the municipality. This crop would appear to offer considerable expansion potential.
- Rubber: A private entrepreneur has promoted the establishment of rubber plantations in the Ixcán, and if the required processing facilities are established, this could be an attractive crop. However, the lag time between planting and harvesting is very long, and this would not be an appropriate crop for the AGIL project.

4. Strategic choices

CHF, with support from USAID under a cooperative agreement, has established a dominant role for development activities related to the AGIL objectives in the Ixcán. CHF has experimented with all of the crops identified in item 3 above, and has an extensive network of demonstration plots used to disseminate the new income production opportunities.

It appears that the primary contribution that the AGIL program can make to the development of the Ixcán is to provide very specialized assistance that can complement CHF's activities. Primary among these (as discussed below) is assistance with development of stable financial services in the Ixcán. In addition, the AGIL program can provide specialized technical assistance concerning the marketing of non-traditional export crops.

Based on the CHF model, it is anticipated that the program will primarily provide assistance to agro-forestry activities, and to such non-traditional export crops as cardamom, vanilla, and heart of palm, and possibly achiote, black pepper, Persian limes, and pineapples.

5. Financial Service Providers

The primary source of financial services in the Ixcán is BANRURAL. Staff of the Ixcán agency of this bank will participate in training courses organized by AGIL for all BANRURAL agencies in the targeted municipalities, and the agency will also benefit from AGIL assistance to the central office. AGIL staff will also meet with the BANRURAL staff in Ixcán to see if any specialized assistance is required.

A second source of financial services in the Ixcán is CESIDE, which has received substantial assistance from CHF in support of micro finance lending. AGIL has also provided a direct grant to CESIDE, and will work closely with CHF to assure that this organization adopts the best practices for micro finance lending, and to assure that the appropriate policies are in place to assure its long-term economic sustainability. It may

be useful to pursue a link between CESIDE and more established micro finance organizations in Guatemala.

6. Implementation Timeline

The Ixcan represents somewhat of a special case for the AGIL program, as CHF is carrying out the types of activities in this region that AGIL is designed to promote. Therefore, AGIL will mainly provide backup support for CHF's activities, as requested by CHF, in order to avoid duplication of effort. AGIL staff will meet at least semi-annually with CHF to discuss program implementation and identify specialized assistance that might be provided. It is anticipated that this assistance will begin in early 2001 with provision of specialized technical assistance in non-traditional export crop development.

Separate from the crop specific technical package, however, AGIL can provide specialized assistance in financial services development. As noted above, the staff of the BANRURAL agency in Ixcan will participate actively in AGIL training and technical assistance programs, and CESIDE will also benefit from support from both CHF and AGIL.

7. Important Complementary Program Activities

None have been identified at this time.

J. Barillas

1. Development Context

a) Geographic Characteristics

Barillas is located in the northern part of the Department of Huehuetenango, bordering with Mexico. The total area of the municipality is 1,112 square kilometers, the largest in the Department. A 150-kilometer road, of which 30 kilometers are paved, connects Barillas south to the Departmental capital, crossing the Cuchumantanes mountains. A project is currently underway to complete paving of this road. An alternative route was constructed in the 1990s via Nenton to the west of the main mountain ridge, but is slightly longer (180 kilometers). In 2000, road improvements and a new bridge created a road link to the east out of Barillas, through Ixcan in Quiché and connecting to northern Alta Verapaz and the Peten.

The municipal capital is located 1,450 meters above sea level, and elevations in the municipality vary from 200 to 3,000 meters above sea level. This broken terrain creates a wide range of climate zones, varying from subtropical hot to mountainous cold. In the municipal capital, temperatures generally range from 20 - 24°C (68 - 75°F). Soil quality in general is good, and water is abundant. There are a number of important rivers in the municipality, with the largest (Rio Ixcan) used to transport some goods to and from Mexico (probably as contraband).

The Encuesta de Bienestar Familiar, carried out in 1999 by the Universidad del Valle with USAID funding, found that 62% of the homes in Barillas have water, but only 18% have electricity. There are approximately 450 telephone lines in the municipal capital plus one each in nine other villages.

b) Human Resources and the Social/Cultural Context

According to the Instituto Nacional de Estadísticas (INE), the population of Barillas municipality in 1998 was 49,761. However, the Diagnostico Municipal carried out in 1999 found the population to be 81,149. Due to immigration from other areas of the Guatemalan highlands, at least five indigenous languages are spoken in Barillas (Q'anjob'al, Mam, Chuj, Aguacateco, and Jacalteco). The Encuesta de Bienestar Familiar found that 92% of the population of Barillas is indigenous Mayan, and 89% of the population lives in rural areas. Approximately 48% of the population is illiterate.

There are three producer organizations in Barillas, with an estimated total membership of 2,235.

Barillas was severely affected during the years of armed conflict, particularly in the 1980s, during which time entire villages were uprooted or eliminated. Reportedly, a large portion of the rural population moved to the municipal or Departmental capitals, or

to Guatemala City, Mexico, or the United States. With the end of the conflict, many of these people have returned.

c) Economic Conditions

Agriculture is the leading economic activity in Barillas. The Encuesta de Bienestar Familiar (EBF) found that 28% of the working population are small farmers, and another 55% are farm workers (although this latter figure also includes seasonal migrant labor working outside of Barillas). In combination, these two figures show the highest economic dependence on agriculture of all the target municipalities except San Mateo Ixtatan. The average age of the small farmers in Barillas is 45, and of the farm workers 25. The EBF found that the average monthly family income in the month preceding the survey was Q886 (urban Q1,719, rural Q784), which is third lowest among the targeted municipalities. Only 8% of the population indicated that they had had access to credit.

The principal economic activities in Barillas are coffee and cardamom production. An estimated 40% of the communities in Barillas produce coffee, with a total estimated production of 100,000 cwts (pergamino) on 4,817 hectares. Production of cardamom is estimated at 50,000 cwts. Extraction of forest products is the next largest economic activity, with forests covering approximately 47% of the total municipal land. Livestock and artisan activities are also important in the municipality.

d) On-going Development Activities

Currently, there are few international-donor-supported development activities in Barillas. The largest of these, the Inter American Development Bank's assistance to the Cuchumantanes region, recently terminated. USAID is supporting activities by the Centro Canadiense de Estudios y Cooperación Internacional (CECI), which is providing assistance to the Asociación Barillense de Agricultores (ASOBAGRI), the Casa Barillense de las Mujeres (CBM), and the development of Planes de Manejo de Recursos Naturales. The AGIL program has also provided a grant to a second-tier non-governmental organization in Huehuetenango (ACODIHUE), to support provision of agricultural and livestock technical services by the Asociación para el Desarrollo de Barillas (ADICBA). ADICBA works primarily with coffee and cardamom producers. Finally, ANACAFE (with funding from USAID) is providing technical assistance to coffee producers to increase productivity, and provides an electronic link to world coffee markets.

2. Development Opportunities and Challenges

Barillas has a large productive potential due to its excellent climate, good soils, abundant water, and industrious population. The range of productive zones allows Barillas to produce a wide variety of crops. The ASOBAGRI association has demonstrated that Barillas organizations are capable of maintaining the discipline required to earn a reputation for excellence on world markets. The connection of Barillas to the transversal del norte highway to the east opens up new marketing routes,

as will the planned road connection north from Barillas into Mexico. Finally, there are a variety of credit institutions offering financial services in Barillas, more so than in most of the other targeted municipalities.

However, the challenges faced in raising incomes in Barillas are also significant. The primary constraint is the municipality's isolation, which requires shipping goods over long distances on poor roads to reach markets. The investment currently underway to pave the principal road connection to the Departmental capital will somewhat alleviate this constraint. Other constraints include a relatively high illiteracy rate, inadequate tourist services, environmental degradation, inadequate social services, and lack of a formal border crossing on the road connecting Barillas to Mexico.

3. Investment Options Considered

- Organic coffee production and marketing: CECI support to ASOBAGRI has helped establish the Association as a recognized and reliable supplier of quality organic coffee to the United States' specialty coffee market. Coffee production in Barillas qualifies as organic production, since during the years of conflict no one spent money on chemical fertilizers or pesticides, and in fact often did not even harvest the coffee. World markets pay a substantial premium for organic coffee, especially for coffee from small scale producers. Barillas has excellent growing conditions for coffee, and there are many more coffee producers who can benefit from ASOBAGRI's expanding activities. However, ASOBAGRI does not have a coffee processing plant (beneficio seco), as does its sister organization in Chajul. Construction of such a facility, if justified based on an economic feasibility analysis, would increase value added in the municipality, and reduce transportation costs for the product.
- Organic cardamom production and marketing: CECI also supports ASOBAGRI's work with cardamom producers, which has led to a successful organic cardamom export program. Again, there are many more cardamom producers that could be added to ASOBAGRI, who could benefit from technical assistance to increase productivity and production quality. Also, Barillas lacks a cardamom drying plant.
- Forest products: Half of the land in Barillas is covered by forests, and timber extraction is a major economic activity. Assistance to the industry could reduce the losses experienced in the industry, and promote use of sustainable forest management plans.
- Rosa de Jamaica: This product is used in making teas and refreshing juice drinks. The climate and soils produce a high quality product, but work is needed in identifying and disseminating pest control measures, in training producers in harvest and post-harvest handling, and with the design and construction of a drying facility.
- Medicinal plants: There are a number of indigenous medicinal plants in Barillas, but little knowledge of the optimal production technology or market channels.

- Handicrafts: There are a number of quality handicrafts produced in Barillas, but there is no organization of the producers, and marketing channels are undeveloped.
- Ecotourism: The scenery in Barillas is outstanding, and the combination of forested hills, raging rivers, and quiet lagoons could be developed into a prime site for tourists. However, basic infrastructure needs to be developed first.

4. Strategic choices

There are two lead organizations in Barillas that are pursuing AGIL program goals: CECI (with ASOBAGRI and CBM), and ACODIHUE (with ADICBA). CECI is providing services under a separate USAID cooperative agreement, and ACODIHUE has recently begun implementation of an AGIL grant. In addition, AGIL has provided a grant to CESIDE to expand access to financial services by micro entrepreneurs in the municipality.

By far the greatest income potential for Barillas is to continue to improve organic coffee and cardamom productivity and export. These are the most significant crops in the municipality in terms of number of producers and area in production, and ASOBAGRI has demonstrated the economic benefits to be derived from direct export to specialized markets. ACODIHUE's activities are also directed at improving coffee and cardamom productivity.

CECI is also providing training courses to women's artisan groups in a number of villages in Barillas, with assistance from AGIL partner AGEXPRONT via its contract with CEDART (with USAID funding). In addition, CECI also works with women's groups that produce medicinal plants.

In summary, rather than duplicate the efforts of CECI and ACODIHUE, AGIL's strategy for Barillas will be to support the activities of these organizations, providing specialized complementary assistance where needed and requested to assure program success.

5. Financial Service Providers

There are three commercial banks with agencies in Barillas, BANRURAL, BANCAFE, and Banco Inmobiliario. The BANRURAL agency staff will participate in AGIL sponsored training programs benefiting all agencies located in the targeted municipalities. It is not anticipated that BANCAFE will expand its micro finance activity to its Barillas branch during the life of the AGIL program, but this agency will eventually begin to provide these services (training for which is provided by AGIL).

The only non-governmental micro finance organization active in Barillas is CESIDE, which has received an institution building grant from AGIL, and is also supported by CHF and CECI. AGIL will continue to support consolidation of this organization,

perhaps helping it to establish a strategic alliance with a national level micro finance organization.

6. Implementation Timeline

Barillas is somewhat similar to Ixcan, in that a separate USAID grantee (in this case CECI) will have a lead role in pursuit of AGIL program objectives, although there is no formal relationship between AGIL and CECI. However, USAID has assigned AGIL the key role in monitoring the impact of all Strategic Objective 4 activities in the target municipalities, so AGIL will meet frequently with CECI to monitor program implementation. AGIL also may be able to provide specialized assistance in organizational development and export marketing that could complement CECI's capabilities.

In addition, however, AGIL is directly responsible for provision of a grant to a second lead implementing organization, ACODIHUE, and will need to closely monitor implementation of this grant. The following provides a preliminary timeline for implementation of this responsibility:

a) Organic coffee and cardamom production

Activity	Timing
1. Grant awarded to ACODIHUE	Feb 01
2. ACODIHUE undertakes development program	Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Mar 01
4. Visit Barillas to monitor program implementation	Mar, Jun, Sep, Dec 01 Mar, Jun, Sep, and Dec 02
5. Assist producers to meet bank credit requirements	Jul 01
6. Institutionalize production technical assistance	Feb/May 02
7. Consolidate production assistance organization	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in Barillas. In fact, the ADICBA is a prime candidate for provision of services under this program.

Although no information is currently available, it is anticipated that construction of farm to market roads within Barillas will also be a priority.

Finally, general support for literacy training and vocational education is important for development of Barillas.

K. San Mateo Ixtatan

1. Development Context

a) Geographic Characteristics

San Mateo is located in the northern part of the Department of Huehuetenango, bordering on Mexico to the north. Its total area is 560 square kilometers. San Mateo is 123 kilometers from the Departmental capital, via a winding all-weather road. The paving of this road is now in progress. San Mateo also has good road connections with Barillas in the east, and via Nenton to the west connecting on to Mexico. There are 47 aldeas, 20 caserios, and 14 cantones within the municipality, but only 21 of these are accessible by roads.

The municipal capital is 2,540 meters above sea level, with temperatures ranging from 12-18°C (54-64°F). In general the municipality is very mountainous, making development difficult. Much of the land is more appropriate for forest cover than for agriculture, but there are various lowland areas that are appropriate for agricultural production.

The Encuesta de Bienstar Familiar (EBF), carried out in 1999 by the Universidad del Valle with USAID funding, found that 58% of the homes in San Mateo have water, but only 18% have electricity. There are eight telephone lines in the municipal capital, and three satellite phones in neighboring communities.

b) Human Resources and the Social/Cultural Context

The 1998 census carried out by the Instituto Nacional de Estadística (INE) indicated that the population of San Mateo was 29,823 persons. Approximately 85% of the population lives in rural areas. Approximately 90% of the population is indigenous Mayan, with the principal language groups Chu'j, Q'anjob'al, Atiteko, and Mam. The municipal capital is located at the site of a pre-Colombian settlement, and became known as San Mateo Ixtatan in 1549, so it is one of the oldest towns in Guatemala. However, areas to the north of San Mateo were settled only recently.

The Comisión Nacional de Alfabetización (CONALFA) estimates that 76% of the population of San Mateo is illiterate (men 64%, women 88%). The EBF found that 68% of the population of the municipality has never attended school. It is estimated that only 44% of children of primary-school age are in school, and this percentage is lower for girls. There are two producer organizations that pursue objectives similar to AGII's in San Mateo, with a total membership of 1,670.

Life and economic activity in San Mateo were severely disrupted during the years of armed violence. Many residents were forced to abandon their homes and relocate elsewhere. Since the end of the conflict, 970 people have resettled in the municipality.

c) Economic Conditions

The EBF found that 46% of the population of San Mateo are small farmers, and 44% are farm workers. This represents the highest dependence on agricultural of all of the target municipalities of the AGIL program. The average age for farmers is 36 years, which is surprisingly low for such a long-settled region.

Average recorded family income in the month preceding the EBF survey was Q544 (urban Q837 and rural Q 485). These are the lowest monthly income surveyed among the target communities. Only 4% of the population indicated that they had access to credit. San Mateo is second to Nebaj in terms of the number of people who migrate to other areas of Guatemala to supplement their incomes by harvesting coffee and other crops. In approximately one third of San Mateo's 60 communities, it is estimated that 30% of the population work as seasonal migrants.

The most profitable crops grown in San Mateo are coffee and cardamom, located in the lower regions of the municipality. Total coffee and cardamom production is estimated to be 28,750 and 4,000 cwts. respectfully. Basic grains are grown in the remaining regions, along with some small livestock operations. However, agricultural producers in San Mateo have little access to improved technology or production credit, so yields are low. Other economic activities include mining of "sal negra," commerce, handicrafts, and firewood harvesting.

d) On-going Development Activities

The only three international-donor-supported development activities related to AGIL objectives that are currently active in San Mateo Ixtatan are: a) the Centro Canadiense de Cooperación Internacional (CECI) program (with USAID funding), a community development program working principally with organic coffee and cardamom producers from its program base in Barillas; b) ASOCUCH (under an AGIL grant), which supports creation of basic agricultural, livestock, and handicraft technical assistance capabilities within the municipality; and c) PAF MAYA, a Guatemalan organization assisting with sustainable agroforestry activities.

2. Development Opportunities and Challenges

Despite the fact that it has a good natural resource base, development conditions in San Mateo are among the bleakest of the AGIL target municipalities. Chronic under investment in education is probably the primary factor explaining this situation. In addition, San Mateo's physical and cultural isolation has reduced its ability to take advantage of improved technologies and diversified markets. Finally, very little attention has been given to the municipality by the Government of Guatemala or until recently by international donors.

The success of organic coffee and cardamom production and export in neighboring Barillas municipality can serve as an opening to provide at least a portion of the

inhabitants of San Mateo (10% of the communities produce coffee and 7% cardamom) with access to improved income opportunities. The paving of the road south from San Mateo to Huehuetenango will also increase the opportunities for commerce which will create new income for the municipality. However, expectations must be kept realistic concerning the AGIL program's ability to improve significantly the incomes of the illiterate basic grain producers in the higher elevations of San Mateo, who constitute the majority of the municipal residents.

3. Investment Options Considered

- Organic coffee and cardamom production and marketing: As noted above, coffee and cardamom are the two leading export crops produced in San Mateo, primarily in the mid to lower elevations. These crops are produced using very rudimentary technology, and productivity can be enhanced while maintaining the organic nature of this production. The ASOBAGRI association in Barillas has developed links to specialty markets that pay a premium for organic production by small farmers, and the San Mateo production can help supply this market. Investment may be needed in the construction of beneficios humedos for the coffee producers and drying facilities for cardamom.
- Horticulture: Approximately 25% of the communities produce vegetables for the domestic market, including beets, onions, and chile peppers. The market access for these crops will improve once the road to the Departmental capital is paved.
- Basic grains: Ninety percent of the municipal inhabitants produce corn and beans, and 31% of the communities produce wheat. While the income potential of these crops is limited, even marginal production improvements would provide income benefits to a large portion of the population.
- Small livestock: Twenty-three percent of the community inhabitants raise small livestock, primarily sheep and goats. Improvements in pasture management and livestock care could have a significant impact on family incomes.
- Handicrafts: The embroidered guipiles for women and the Capixays used by men are native artisan products sold in tourist markets. However, the demand for these products is limited, but the skills used in producing them could also produce a broad range of other products.
- Ecotourism: The San Mateo region is very picturesque and the native cultures are very attractive. However, San Mateo lacks appropriate hotels and restaurants to attract any but the back packer trade, which has limited economic impact. With the paving of the road to Huehuetenango, it is likely that tourist interest will increase.

4. Strategic Choices

The leading development institutions active in pursuing the AGIL program goals in San Martin are CECI/ASOBAGRI and ASOCUCH, the first under a direct USAID cooperative agreement, and the second a recipient of an AGIL program grant. In order to avoid confusion and to recognize the important role of these organizations, the AGIL support for local income generation in San Mateo will be provided through these two organizations. AGIL staff will meet frequently with those responsible for program execution, in order to monitor program impact and to determine if and where specialized technical assistance available through AGIL would be important in achieving program goals.

Clearly, the economic activities that offer the greatest potential for San Mateo Ixtatan are organic coffee and cardamom, even though only a small percentage of the communities produce these crops. The assistance that will be provided to these producers by CECI and ASOBAGRI has been shown to be effective in the neighboring municipality of Barillas, and should also produce positive results in San Mateo.

The AGIL ASOCUCH grant supports a broader range of economic activities than does the CECI grant extension, in that it contemplates work with a number of minor crops in addition to coffee and cardamom (although the CECI grant's support for general community development could in the end also lead to more diversified program activities). This will provide AGIL and its partners with greater information on the potential for these other crops.

AGIL staff will meet regularly with CECI and ASOCUCH staff to review progress against objectives and to see if there any specialized program needs not contemplated in the grants, which AGIL could meet.

5. Financial Service Providers

As noted earlier, very few producers in San Mateo have access to credit resources. The only commercial bank to offer services is BANRURAL, and this is done from its agency in Barillas, as it does not have an office in San Mateo. The plans to expand ASOBAGRI activities into San Mateo contemplate linking BANRURAL credit more closely with the technical assistance and marketing assistance of the Association.

The only non-governmental financial service organization known to be offering services in San Mateo is CESIDE, and its activities will be monitored as part of the AGIL grant to that organization. PAF MAYA has provided financial services to micro entrepreneurs in other regions, but has canceled the activity in Uspantan due to negative experience. It is unclear whether PAF MAYA offers this assistance at this time in San Mateo.

6. Implementation Timeline

Assistance from CECI for organic coffee and cardamom production in San Mateo is funded under that organization's Communities in Transition cooperative agreement with USAID. AGIL's role in relation to this agreement is simply the collection of performance

monitoring information, and the provision where needed and requested of specialized export production and marketing technical assistance, or similar support, that is not contemplated under the USAID/CECI agreement. No timeline for this potential assistance can be prepared at this time. Assistance being provided via ASOCUCH, however, can be scheduled:

a) Creation of a cadre of local agricultural and livestock technicians (promotores)

Activity	Timing
1. Grant awarded to ASOCUCH	Feb 01
2. ASOCUCH undertakes development program	Feb 01
3. Assess credit needs and technical assistance needs of proposed interventions	Jun 01
4. Visit Barillas to monitor program implementation	Mar, Jun, Sep, Dec 01 Mar, Jun, Sep, and Dec 02
5. Assist producers to meet bank credit requirements	Jul 01
6. Institutionalize production technical assistance	Feb/May 02
7. Consolidate production assistance organization	Dec 02

7. Important Complementary Program Activities

AGIL's work with MAGA to create a viable mechanism to finance private sector technology transfer will also be an important component in the development of broader economic activity in San Mateo. In fact, ASOCUCH is a prime candidate for provision of services under this program.

Although no information is currently available, it is anticipated that construction of farm to market roads within San Mateo will also be a priority.

Finally, investment in literacy training and vocational skills would be essential to the long-term development of the municipality.